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**An Analytical Study of Job Satisfaction Among Saudi  
Nationals in the Saudi Economic Offset Program Companies**

**by**

**Mohammed M. Al-Sebaie**

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**Supervised by**

**Professor Ewan Anderson**

**A Thesis submitted for the degree of Doctor of Philosophy**

**Graduate Society**

**University of Durham**

**2000**



**19 JUN 2001**

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# **An Analytical Study of Job Satisfaction Among Saudi Nationals in the Saudi Economic Offset Program Companies**

**By: Mohammed M. Al-Sebaie**

## **Abstract**

This study is principally concerned with measuring, and identifying the factors that affect, the job satisfaction levels of Saudi nationals employed by companies established as part of the Kingdom of Saudi Arabia's Economic Offset Program.

The study begins by providing an overview concerning the purpose, potential significance, and achievements to date of the Kingdom of Saudi Arabia's Economic Offset Program, which constitutes a crucial component of the Saudi government's plans, both for the long-term diversification of the economy, and for the generation of much needed employment for the country's growing population.

The study proceeds to consider the potentially very significant but previously neglected topic of job satisfaction levels in the offset companies, addressing the issue in two ways. First, the study considers the underlying causes, and the practical consequences, of job satisfaction and job dissatisfaction in light of the considerable body of theoretical and empirical literature that has been produced on the subject in other settings. Second, and more importantly, the study explains the development and presents the results of an empirical research project carried out by the researcher in three of the more developed Saudi offset companies.

The study will report that the overall level of job satisfaction in the three companies surveyed is quite high, and will show that job-related factors, such as the nature of an employee's work itself, recognition and status, were found to be the most important correlates of the high overall satisfaction level. The study also calls attention to some potentially important problem areas, such as worker dissatisfaction with the companies' policies governing training, dismissals, transfers and promotions.

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## **List of Abbreviations**

AACC	Aircraft Accessories and Component Company
AEC	Advanced Electronics Company
ARABASCO	Arabian Aircraft Services Company
ARAMCO	Arab-American Oil Company
ASAC	Al Salam Aircraft Company
AWACS	Airborne Warning and Control System
BAe	British Aerospace
BITG	Boeing Industrial Technology Group
BOC	British Offset Committee
BP	British Petroleum
EOC	Economic Offset Committee
EOS	Economic Offset Secretariat
EOTP	Economic Offset Technology Park
F-16	US-designed aircraft manufactured by General Dynamics Corporation.
FCO	UK Foreign & Commonwealth Office
GCC	Gulf Cooperation Council
GD	General Dynamics Corporation
GE	General Electric
GIC	Gulf Investment Corporation
GSM	Global Standard for Mobiles
IISS	International Institute for Strategic Studies
ISE	International System Engineering Company
JDI	Job Descriptive Index
JIME	Japanese Institute for Middle Eastern Economics
KKIA	King Khalid International Airport, Riyadh, Saudi Arabia

KSA	Kingdom of Saudi Arabia
MEBC	Middle East Battery Company
MBT	Main Battle Tanks
MEED	Middle East Economic Digest
MEPC	Middle East Propulsion Company
MODA	Ministry of Defence and Aviation, Saudi Arabia
MSQ	Minnesota Satisfaction Questionnaire
NATO	North Atlantic Treaty Organisation
NCB	National Commercial Bank
NIC	National Industrial Company
NSQ	Need Satisfaction Questionnaire
LVPS	Low Voltage Power Supply
OPEC	Organisation of Petroleum Exporting Countries
PTT	Post, Telephone and Telegraph
R&D	Research and Development
RFP	Request for Proposals
RR	Rolls Royce
RSAF	Royal Saudi Air force
SABIC	Saudi Arabian Basic Industries Corporation
SAG	Saudi Arabian Government
SAIC	Saudi Advanced Industries Company
SDTC	Saudi Development & Training Company
SEOC	Saudi Economic Offset Committee
SIDF	Saudi Industrial Development Fund
SPSS	Statistical Package for Social Science
SR	Saudi Riyal. (Fixed Exchange rate of SR 3.75 = US \$1.00)



TEP	Telephone Expansion Project
UAE	United Arab Emirates
UK	United Kingdom
UK MOD	UK Ministry of Defence
US	United States of America
USAF	US Air Force
USC	United Sugar Company
USSR	Union of Soviet Socialist Republics

## **Declaration**

This thesis results from my own work and has not been previously offered in candidature for any other degree or diploma.

# **Chapter One:**

## **Introduction**

### **1.1 The Kingdom of Saudi Arabia's Economic Offset Program and its Significance**

This study is principally concerned with measuring, and identifying the factors that affect, the job satisfaction levels of workers employed by companies established as part of the Kingdom of Saudi Arabia's Economic Offset Program. Before proceeding to discuss the aims of the study, its methodology and limitations, and the way it is organised, it will be useful to have a general understanding concerning the nature, objectives and significance of the Economic Offset Program. This section provides a brief overview on these topics.

#### **1.1.1 The Concept of Economic Offsets**

According to the Oxford English Dictionary (1998) the definition of "offset" is: "to counterbalance, or to compensate." During the Cold War, the term offset became associated with a defence or defence-related counter-trade: the balancing of an international defence purchase by the supplier buying goods from the customer's economy. Subsequently, the term offset has also been applied to non-defence-related counter-trades. Hence, when the terms offset and offset program are used in the context of this study, they refer to a form of counter-trade used by developing countries, typically in an effort to reduce the economic burden imposed by, or to improve the economic terms of, an underlying import contract. Offsets can take many forms, such as joint ventures, technology transfers, product buybacks, etc. In various countries they have included arms purchases, food imports, construction projects, the provision of management services, etc.



There are two types of offsets that should be distinguished from one another, both with respect to their goals and with respect to the sort of seller obligation they involve. The first type of offsets may be referred to as **direct offsets**, and the second type may be referred to as **indirect offsets** (Saudi Commerce & Economic Review, 1998).

Direct offsets have the overall effect of reducing the cost of purchase and generally involve activities related to the principal contract from a technical viewpoint. For example, the seller may assist the buyer through mechanisms such as supply arrangements, technology licenses or co-production of the underlying product in the purchasing country. In essence, the purchasing country participates in supplying the product or service. The purchasing country may also hope to develop its own expertise with respect to the technology associated with the purchased product.

In indirect offsets, by contrast, the seller agrees to assist the importing country in development or investment plans that are not directly related to the principal import contract. The aim is generally not so much to reduce the cost as to improve the terms of the deal by enabling one or both of the parties to derive some additional economic benefit from it, often in the long-term. For example, the seller may agree to participate in a separate joint venture or ventures, or may agree to invest in industrial, financial or commercial projects that are not directly related to the principal contract.

### **1.1.2 The Saudi Economic Offset Program and Its Objectives**

The high levels of oil revenue that the Kingdom of Saudi Arabia enjoyed during the oil boom periods of the 1980s enabled it to engage in high levels of arms spending. From 1983 to 1993, at which point it cut back on arms purchases, the Kingdom imported US\$60.2 billion worth of weapons, making it the largest arms importer in the developing world.

Like many other arms-purchasing nations during this period, the Kingdom began to see potential in the idea of using offsets in conjunction with weapons purchases to stimulate advances in technology and faster economic growth. However, while other countries concentrated on using direct offsets to reduce costs and to create and sustain defence-related industrial capabilities, the Kingdom's approach involved the application of indirect offsets designed to establish a sound basis for the diversification of the Saudi economy. Saudi economic planners have long recognised the fact that, as oil is not a renewable natural resource, the prosperity derived from oil sales cannot be sustained indefinitely. Consequently, diversification into industries that can provide revenue and employment in the long-term has been a key priority. Essentially, by applying indirect economic offsets, the Kingdom hoped to secure some long-term economic return on its massive military expenditure by requiring the suppliers and contractors involved in its defence purchases to invest in non-oil industrial development ventures in the Saudi private sector (Martin, 1996).

In 1984, Saudi Arabia became the first Gulf country to institute an economic offset program. The overall program, which the researcher will subsequently refer to as the

Kingdom of Saudi Arabia's Economic Offset Program, may be sub-divided into a number of offset programs. The first of these, the Peace Shield I Offset Program, coincided with the institution of the overall Program. Much like the offsets previously employed by other countries, this first program was tied to a defence program, namely the Peace Shield Command and Control Program. Under the terms of the program, US-based defence contractors would not only supply Saudi Arabia with hardware and support for a state-of-the-art air defence system, including a fleet of Advanced Warning and Control Systems (AWACS) aircraft and an extensive complementary ground-based command, control and communications system, but would also accept an offset obligation to reinvest 35% of the technical value of the contract into advanced joint ventures in the Saudi private sector, in which Saudi investors would hold a 50% stake.

However, although the Peace Shield I Offset Program was associated with a defence contract, just like previous offsets established elsewhere, and although it was administered by the Ministry of Defence and Aviation (MODA), it was not primarily a military program. Furthermore, unlike previous offsets elsewhere, it was not a direct offset designed primarily to reduce costs or to enable Saudi Arabia to develop defence industrial capabilities. Rather, it was an indirect offset designed specifically to diversify the Saudi economy by establishing high-technology industries in areas outside both the oil and defence sectors. More specifically, the program envisaged the setting up and operation of a comprehensive aerospace industrial complex adjacent to the King Khalid International Airport to provide Saudi Arabia with advanced industry in such fields as: aircraft repair and modification; component and electronics manufacturing and repair; and computer systems engineering.

Subsequent offset programs developed by the Kingdom in the context of the overall Economic Offset Program, and programs established later by the other states of the Gulf Cooperation Council (GCC), have evolved in a manner consistent with these states' characteristic indigenous populations and abundant investment capital. That is to say, the subsequent programs have also been indirect offsets designed to promote economic diversification by developing high technology industries that, hopefully, will provide revenue and a strong employment base in the long-term (Jime Review, 1998).

To date, the Kingdom has developed a total of seven offset programmes (Saudi Commerce & Economic Review, 1998) in the context of its overall Economic Offset Program:

1. The Peace Shield I Offset Program, described above, involving primarily Boeing and General Electric of the US;
2. The Al Yamamah Offset Program, negotiated with the British government in the late 1980s in association with a major defence purchase from British Aerospace, provides a framework to encourage other British companies to invest in non-oil sectors of the Saudi economy;
3. The Peace Shield II Offset Program, an extension of the Peace Shield I program in 1991, involving primarily Hughes Aircraft Co. of the US;
4. The General Dynamics Economic Balance Program, established as part of a purchase of M1A2 Abrams Main Battle Tanks in 1992 from General Dynamics Corp. of the US;

5. The McDonnell Douglas Offset Program, established as part of a purchase of F-15 fighter aircraft in 1993 from McDonnell Douglas Corp. of the US;
6. The Al Sawari Offset Program, negotiated with the French government in the early 1990s in association with a naval defence purchase involving Thompson CSF; and
7. The AT&T Offset Program, Saudi Arabia's first non-defence-related offset program, associated with a major telecommunications contract awarded to the US company AT&T in 1994.

More details concerning these programs and their implementation will be provided in Chapter Two: Background Information Concerning the Saudi Economic Offset Program. For now, it is sufficient to note that the offset programs that followed the Peace Shield I program were fashioned on a case-by-case basis in negotiations with foreign defence contractors. For this reason, the specific terms and conditions of subsequent offset programs have varied somewhat, depending on the country of origin and the respective preferences of the firms involved. However, the fundamental goals and objectives of the overall Economic Offset Program have been effectively the same throughout its existence. These can be summarised as follows:

1. the expansion of the Kingdom's industrial base, particularly in terms of diversification away from oil;
2. the creation of investment opportunities outside defence-related fields for the private business sector;
3. the development of, and the generation of employment for, experienced Saudi technical, professional, and managerial manpower;



4. the provision of competitive substitutes for imported systems, equipment, goods and services;
5. the manufacture of products in the Kingdom which have export potential;
6. the rational use of Saudi resources, including capital and energy; and
7. the establishment of service industries that enhance, develop, support or maintain the Saudi economic infrastructure.

### **1.1.3 The Significance of the Saudi Economic Offset Program**

The long-term importance of economic diversification for the Kingdom of Saudi Arabia should be fairly obvious. As the researcher of this study has previously observed, it has long been recognised by Saudi economic planners that, if long-term prosperity is to be sustained, steps must be taken to reduce the country's reliance on oil revenue by establishing other viable long-term industries that are compatible with its somewhat limited natural resource base. Economic and demographic trends over the past decade have increased the urgency of the need for diversification. Fluctuating oil prices, coupled with one of the highest birth-rates in the world have resulted in rising levels of unemployment and a massive decline in per-capita income (i.e., from US\$15,813 in 1981 to US\$7,590 in 1997) (ESCWA, 1999).

The importance of diversification in terms of alleviating these worrying trends was reflected in the Kingdom's Sixth Development Plan (1995-2000) the main goals of which included industrialisation and the encouragement of private sector investment in:

- 1) industries dependent on local raw materials;
- 2) projects which apply new

technologies from which the Kingdom can derive economic advantages; and 3) areas of much needed development (Ministry of Planning,1995).

Needless to say, the Economic Offset Program is very significant in this context. Indeed, it is arguably the most potent tool the Saudi government has at its disposal to encourage the sort of economic diversification the Kingdom needs to secure its long-term economic health. In addition to allowing the Kingdom to derive security-related benefits from its past and current substantial oil revenues, the Program enables it to derive long-term economic benefits that it could not otherwise hope to enjoy as a result of oil sales. Effectively, the Program provides a good opportunity to transform the Kingdom's current relative wealth into a foundation for its future prosperity. The indirect offsets that have been developed (and that continue to be developed) by the Saudi government combine a number of vital elements that would be difficult to bring together in any other context. In essence:

1. by compelling foreign defence contractors to reinvest a substantial part of the value of contracts into non-oil sectors of the Saudi economy, they provide needed investment capital for new industries and development projects;
2. by requiring that reinvestment should take the form of joint ventures in which Saudi investors hold at least an equal stake, they provide a guarantee that Saudi as well as foreign entrepreneurs stand to benefit from the long term success of such projects;
3. by establishing a strong basis for cooperation between the Saudi private sector and world leaders in high-technology industries, they enable the Kingdom to benefit from first-rate technical, management and marketing expertise in the development of its own high-technology industries, one of the more attractive and viable areas for

diversification given Saudi Arabia's relative paucity in terms of the natural resources required to develop other sorts of industry; and

4. by asserting that, wherever possible, Saudi nationals should be trained for and hired to fill new jobs in all areas (i.e., management, engineering, production, support services, training, etc.) they provide a significant opportunity for developing Saudi human resources and a potentially very significant future employment base.

As the researcher will explain in some detail in Chapter Two, the Kingdom has already begun to see significant benefits with respect to all of these elements as a result of the offset projects that have been implemented so far. To cite some specific figures: a total of 15 high-tech firms involving an outlay of SR2.9 billion have been set up, employing over 2,000 Saudi nationals in a variety of fields (Arab News, 1997). More generally, the offset companies that have been established have: 1) given the Kingdom a substantial amount of new technology and a considerable number of new industries; 2) affected the Kingdom's status as an importer and exporter with respect to non-oil goods and services; 3) led to the development of a new cadre of highly trained Saudi professionals with management and/or technological expertise; and 4) made the Kingdom a considerably more attractive investment prospect.

Consequently, the Economic Offset Program has demonstrated great potential with respect to the future diversification and development of the Saudi economy. Not surprisingly, the current government has made the continued development and success of new offset programs and projects a very high priority, and it is making every effort to solve some of the problems that have affected the individual programs up to this point.

As the researcher will explain in the next section, the chief aim of this study relates to one problem which has not yet received much attention and which may have a significant effect on the long-term success of both the overall Economic Offset Program and the offset companies developed through the various individual offset programs.

## **1.2 The Statement of the Problem and the Purpose of the Study**

The researcher has had, and still has, a good relationship with many people working directly or indirectly with the companies set up as a result of the Economic Offset Program. As the director of Land Force public relations in the MODA, he has considerable knowledge about some of the companies' internal problems. The researcher noticed signs of dissatisfaction among some of the offset companies' employees when he had opportunities to meet them in the context of his work. This concerned the researcher, because he was aware that many organisational researchers have linked low job satisfaction levels to problems such as decreased productivity, absenteeism and high levels of staff turnover. The offset company employees speaking with the researcher raised several issues indicating unhappiness with factors associated by many theorists with job performance. The problem seemed to surface three or four years after the establishment of some of the offset companies.

As the researcher explained in the previous section, the success of the various companies established through the Economic Offset Program is crucial to the long-term health of the Saudi economy. Consequently, any factor that relates to the continuing development and success of the offset companies is potentially quite significant, and requires careful consideration. Unfortunately, up to this point in time, the job

satisfaction issue has not really received such consideration, and little has been done in terms of: 1) measuring the extent of dissatisfaction in the offset companies; 2) trying to understand its underlying causes 3) considering its potential significance; or 4) taking appropriate steps to improve worker satisfaction levels.

Essentially, the primary purpose of this study is to address these previously neglected issues in two ways. First, the study will consider the underlying causes, and the practical consequences, of job satisfaction and job dissatisfaction in light of the considerable body of theoretical and empirical literature that has been produced to address the subject in settings outside the Saudi economic offset companies. Second, and more importantly, the study will present the results of an empirical research project carried out by the researcher in three of the more developed Saudi offset companies. (These include the Advanced Electronics Company, the Al Salam Aircraft Company and International Systems Engineering, each of which will be detailed in Chapter Two along with the other offset companies that have been established.) The research project was designed with reference to the existing literature, and had two main functions: first, to measure the overall levels of worker satisfaction in the three selected offset companies; and, second, to determine the relative significance, in this context, of different job satisfaction factors that have been suggested by other researchers to be important. A secondary function of the research project was to test the applicability of Western theories and models of job satisfaction in the Saudi context.

The researcher hopes that his conclusions concerning both the existing levels of job satisfaction in the Saudi offset companies, and the identification of the most significant

factors that contribute to these levels, will help decision makers and managers, in the Saudi government and in the individual offset companies, to adopt policies that will promote higher levels of worker satisfaction in the future. As the offset companies are expected to become a very significant part of the future economic base of the Kingdom, it is extremely important, perhaps particularly in this crucial early stage of their development, to be aware of the problems associated with job dissatisfaction and to do everything possible to protect the companies and to maximise their productivity.

As one of the principal aims of the Economic Offset Program is to generate employment for Saudi nationals, it is important for the workers to realise that they themselves are considered to be one of the nation's most valuable resources. In keeping with this priority, the researcher hopes that the very fact that a study like this one is being done will help to reassure offset company employees that decision makers do respect them, do appreciate their work and are concerned about their job-related problems and grievances. Perhaps this knowledge alone will help to enhance their level of job satisfaction and encourage them to work diligently.

Finally, the researcher believes that his research will contribute in two ways to the general understanding of theorists and researchers looking at the topic of job satisfaction.

First, although the body of literature on the topic of job satisfaction is extensive, there is a significant lack of research pertaining to developing countries in general, and Saudi Arabia in particular. The prevalent theories of job satisfaction were developed with

reference to competitive labour markets and work settings in developed Western economies, and the empirical studies that have been done thus far have also been based mostly within the same context. The researcher believes that this study is one of the first empirical studies of job satisfaction to be conducted in Saudi Arabia. Certainly it is the first to look at job satisfaction levels in the crucial setting of the offset companies. As noted previously, one of its aims is to test the applicability of the Western-developed theories and models in the context of the developing economy of Saudi Arabia. The researcher feels that his results and conclusions will add to the existing literature by showing how such theories can be employed in relation to developing economies generally, and to Saudi Arabia specifically. He also hopes that the study will motivate other researchers in Saudi Arabia and elsewhere to look at the topic of job satisfaction.

Second, as part of his review of the existing literature on job satisfaction, the researcher has observed that most of the empirical studies of job satisfaction that have been carried out in specific job settings focus on only a few of many potential job satisfaction factors related to personal circumstances and aspects of the work environment. The empirical research conducted as part of this study was designed to look at a broader range of factors and to assess their relative significance in terms of shaping worker attitudes. The researcher recognises that the importance of the various factors is bound to vary somewhat in relation to different employee groups and different work settings. For example, the most important satisfaction factors for Saudi employees working in the offset companies may be much different than the most important factors for Western employees working in a different sort of industry, etc. However, the researcher feels that his study has benefited from looking at a broad range of factors, and that other

researchers may benefit from employing a similar approach. The researcher would suggest that it is particularly important to recognise and account for a couple of important distinctions. The first distinction involves the difference between intrinsic factors, which relate to the nature of the work itself (for example, creativity, variety of tasks, autonomy, etc.) and extrinsic factors, which have to do with the context of the work (for example, organisation policy, relations with one's supervisor, relations with one's work group, etc.). The second distinction is concerned with the difference between personal factors (for example, age, work experience, level of education, marital status, etc.) and factors related to the work (i.e., the intrinsic and extrinsic work factors associated with the first distinction). Such an approach allows the researcher to explore the interrelationship between the individual, his work and his work environment in a more comprehensive manner.

### **1.3 The Methodology and Limitations of the Study**

As the researcher indicated in the previous section, the primary purpose of this study involves measuring the levels of job satisfaction in three of the more developed Saudi offset companies, and identifying the factors which contribute most significantly to satisfaction or dissatisfaction in this context. In order to achieve this purpose, the researcher employed the following methodology: 1) he conducted a literature review on job satisfaction; 2) he developed and tested a questionnaire designed to measure job satisfaction and identify the factors associated with it; 3) he distributed the questionnaire to employees in the selected Saudi offset companies; 4) he analysed the data provided by the responses to the questionnaire; and 5) he supplemented his knowledge in critical



areas suggested by the data analysis through conducting interviews with officials and employees in the three offset companies.

### **1.3.1 The Literature Review**

The researcher first conducted an extensive review of existing literature on job satisfaction with the objective of gaining some understanding of the potential causes and consequences of different levels of worker satisfaction.

Essentially, he found that there is no overall consensus among theorists or empirical researchers concerning exactly which factors contribute to high or low levels of job satisfaction. Some studies cite some factors as being particularly significant and other studies cite other factors. Drawing together some of the more influential theoretical models and the findings of a number of empirical studies (which will be presented in detail in Chapter Three: A Review of Literature on Job Satisfaction) the researcher compiled a fairly broad list of potential job satisfaction factors. These included: 1) personal factors (or personal characteristics), such as age, gender, work experience, level of education, etc.; 2) intrinsic factors relating to the nature of the work itself, such as creativity, task variety, autonomy, etc.; and 3) extrinsic factors related to the work context or the work environment, such as salary, job benefits, supervision, promotion, status, recognition, working conditions, work group relations, and the policy and characteristics of the employing organisation.

The literature review also led the researcher to note that, although it is difficult to establish the precise nature of the relationship between job satisfaction and job

performance, there does seem to be a consensus among researchers in the field that there is a consistent relationship between high levels of job satisfaction and worker motivation. Furthermore, the researcher observed a consensus that there does seem to be a direct, though sometimes overstated, relationship between job dissatisfaction and problems such as lower productivity, absenteeism and staff turnover.

### **1.3.2 The Development and Testing of the Research Questionnaire**

Taking into account particularly those parts of the literature concerned with the most frequently cited job satisfaction factors and the methods employed by other researchers conducting empirical studies on job satisfaction, the researcher designed a questionnaire intended: 1) to measure the respective levels of job satisfaction in the three selected offset companies; and 2) to identify the underlying causal factors most significantly associated with these levels of satisfaction. The questionnaire method was chosen because the researcher agreed with the conclusions of several other researchers (Al-Nasr, 1999) (Bryman and Cramer, 1994) (Luthans, 1989) who identified it as being the best and most efficient way of measuring job satisfaction.

Although several standardised job satisfaction questionnaires (such as the Minnesota Satisfaction Questionnaire and the Job Descriptive Index) are available, and have been employed by other researchers, the researcher wanted his questionnaire to test a greater range of potential job satisfaction factors, to employ more questions, and to be better fitted to the specific context of the study (i.e., the Saudi offset companies) than these standard questionnaires. Consequently, the researcher adapted existing questionnaires to develop a unique questionnaire specifically designed to meet the needs of this study.

The researcher proceeded to employ a pilot study to test the questionnaire. More details concerning the development, the specific content and the testing of the questionnaire will be provided in Chapter Four: The Methodology of the Empirical Research Project.

### **1.3.3 The Distribution of the Questionnaire and Associated Considerations**

After developing and testing the research questionnaire, the researcher distributed it to a total of 450 workers within the three selected offset companies. This total included workers from all job categories (i.e. supervisors, managers, engineers, technicians, clerks, and security guards). Details concerning the procedure of distribution, the response to the questionnaire, and the obstacles that limited its efficacy will be presented and explained in Chapter Four. However, it is important to note at this point that the limitations of this study are, to a great extent, related to the limitations of the distribution, and of the response to, the questionnaire.

It should be noted that the group of employees who received the questionnaire was composed entirely of Saudi nationals. Expatriates were not included in the study. The researcher does not by any means wish to suggest by this that the satisfaction of the expatriate workers is unimportant. The primary consideration in the decision to exclude them relates to the fact that the expatriate workers have different job characteristics and, perhaps, different values than the Saudi workers employed in the offset companies. Significantly, the expatriate workers tend to be temporarily employed on a contractual basis, rather than permanently employed, and hence, may have different work objectives. For example, Saudis might be more concerned with long-term imperatives

such as promotion, status in the company, etc., while expatriates may be more concerned with short-term factors such as pay. As Westerners, expatriates may be seeking satisfaction from different work factors than Saudi nationals. For example, they may derive satisfaction from the fact that their job allows them to gain experience of another culture, a value that would not really be applicable in the case of the Saudi employees. Because of such differences, the researcher concluded that it would be impractical to look at the job satisfaction of Saudi nationals and expatriates as part of the same study.

Given this limitation, the researcher was principally interested in looking at Saudi nationals for two important reasons. First, one of the researcher's aims was to test the validity of the Western developed theories and models of job satisfaction in the Saudi context, and this obviously required a focus on Saudi rather than Western workers. Second, and more importantly, it is an undeniable fact that the long-term success of the offset companies will ultimately depend on Saudi nationals. While the guidance and expertise of expatriate elements is important and appreciated during the early stages of the development of the offset programmes, the primary responsibility for building up the new companies and guiding them in the right direction rests with the Saudis themselves. It is their economic future that depends on the success of the Economic Offset Program. The Program was designed to generate new employment for Saudi nationals, and as unemployment levels have been on the increase, the government has been ever more concerned to implement a Saudisation policy (i.e., the replacement of expatriate employees by qualified Saudi nationals as soon as possible). It is, therefore, sensible for the government and the management of the offset companies to take every

possible step to ensure that Saudi nationals are content and productive in the new jobs, and, as the researcher has previously noted, his key aim in this study is to provide information and analysis that will help them with this task.

A second limitation of the study relates to the employees' response to the research questionnaire. As noted previously, it was distributed to a total of 450 employees working in all of the different job categories of the selected offset companies. However, due to various factors (detailed in Chapter Four), only 302 acceptable responses to the questionnaire were received. Although this percentage was disappointing, it was within the acceptable limits the researcher defined for the study.

#### **1.3.4 Data Analysis**

The data collected from the offset company employees' responses to the research questionnaire was analysed at the College of Art at King Saud University in Saudi Arabia using the Statistical Package for Social Science (SPSS). More details concerning the specific techniques of analysis employed, and the reasons why they were selected by the researcher are provided in Chapter Four. The actual data obtained from the responses to the questionnaire is analysed, presented and explained in detail in Chapter Five: Data Presentation and Analysis.

#### **1.3.5 Interviews**

The researcher supplemented the data he obtained from the employee's responses to the research questionnaire, especially in certain critical areas suggested by the data analysis, through conducting interviews with employees and officials at the three offset

companies. The main purpose of the interviews was to probe deeper into worker attitudes towards the issues raised in the questionnaire. Information concerning the procedure employed for the interviews and the researcher's observations about the limitations of the interview process in the context of this research project will be presented in some detail in Chapter Four. Wherever possible, the data obtained from interviews was integrated into the relevant sections of Chapter Five along with the analysis and presentation of the data collected as a result of the research questionnaire.

## **1.4 The Organisation of the Study**

Including this introductory chapter, the study consists of six chapters. This section presents a brief description concerning the arrangement and topics of the remaining five chapters.

**Chapter Two** is entitled **Background Information Concerning the Saudi Economic Offset Program**. The purpose of the chapter is to help the reader to develop a better understanding of several issues relating to the Program: 1) the development and implementation of the individual offset programs to date; 2) the administration of the overall Program and the government's development objectives for future individual offset programs; 3) the achievements of the Program to date, and their significance in relation to the Kingdom's economic future and 4) recent and emerging trends that might affect the future prospects of the Program. The chapter begins by presenting more detailed information about the individual offset programs, and the companies that have been founded as a result of the economic offset projects. This includes specific background information on the three companies included in the empirical research

project. The chapter proceeds to examine the administration of the Economic Offset Program, looking particularly at the institutions the government has established to oversee the individual programs and the development guidelines these institutions have put in place. The chapter also assesses the achievements of the Economic Offset Program to date and looks at the possible consequences of recent and emerging trends that relate to the Program.

**Chapter Three** is entitled **A Review of Literature on Job Satisfaction**. The purpose of the chapter is to present a review of: 1) some of the more influential theories of job satisfaction; and 2) significant empirical studies conducted by other researchers to determine the most significant job satisfaction factors in different work settings. The chapter will begin by discussing the existing definitions of job satisfaction presented by different theorists. With respect to this, the chapter presents a brief survey of some of the more significant definitional issues and examines the importance of distinguishing job satisfaction from related concepts such as motivation and morale. The chapter proceeds to discuss some of the more influential and significant theories of job satisfaction in some detail. In the following section, the researcher draws together a significant number of theories and empirical studies to explore the factors associated with high and low levels of job satisfaction. This chapter will also consider the potential consequences of low and high job satisfaction levels in light of the conclusions drawn about this issue by many theorists and researchers.

**Chapter Four** is entitled **The Methodology of the Empirical Research Project**. This chapter is concerned with describing the methodology that the researcher employed with

respect to: 1) the choice of the questionnaire method for measuring job satisfaction; 2) the design and development of the research questionnaire used in the study and the pilot study employed to test the questionnaire; 3) the distribution of the questionnaire and the difficulties encountered with respect to obtaining the responses; 4) the techniques of statistical analysis applied to the data obtained from the responses to the questionnaire; and 5) the incorporation of interviews to supplement the data obtained from the responses to the questionnaire.

**Chapter Five** is entitled **Data Presentation and Analysis**. This chapter will present the data obtained from the responses to the questionnaire, and from the interviews, along with the analysis carried out by the researcher. The presentation and analysis will first consider the data obtained on overall job satisfaction levels, and its validity in terms of some observations that were raised by a number of scholars, as well as some potentially important economic and cultural considerations. The chapter will proceed to present the data on, and to assess the collective and individual significance of, both the personal characteristics and the job-related factors included in the questionnaire. Each section, and the questions contained therein, will be examined separately. The personal characteristics section of the questionnaire was designed to collect data on, and to assess the impact of: 1) age; 2) monthly income; 3) experience in current job; 4) experience in all kinds of job; 5) qualifications; 6) job title; and 7) marital status. The job satisfaction factors section, was designed to collect data on, and to assess the importance of: 1) the work itself; 2) pay; 3) job benefits; 4) recognition; 5) supervision; 6) promotion; 7) working conditions; 8) co-workers; 9) status; and 10) organisational policy.



Finally, **Chapter Six** is entitled **Conclusions and Final Discussion**. This chapter presents a summary of the study's overall findings, considers some of the issues raised by the study and concludes the study.

## **Chapter Two:**

# **Background Information Concerning the Saudi Economic Offset Program**

### **2.1 Introduction**

In the introductory chapter, the researcher presented a brief overview that described the Kingdom of Saudi Arabia's Economic Offset Program, examined its objectives and considered its significance. Because the companies developed as a result of the individual offset programs are the work setting with which this study on job satisfaction is primarily concerned, the researcher feels that, before proceeding to consider the job satisfaction issue, it will be useful for the reader to develop a more detailed understanding of the Economic Offset Program and its components.

Unfortunately, due to a scarcity of published materials and official documents, and due to the sensitive nature of much of the technology involved, information on the individual offset programs and projects is not readily available. Consequently, the researcher has drawn from a number of resources in order to present the reader with information on the following important issues: 1) the development and implementation of the individual offset programs to date; 2) the administration of the overall Program and the government's development objectives for future offset programs; 3) the achievements of the Economic Offset Program to date, and their significance in relation to the Kingdom's economic future and 4) recent and emerging trends that might affect the future prospects of the Economic Offset Program.

The chapter is organised as follows. Section 2.2 presents more detailed information about the individual offset programs developed within the context of the overall Program. Section 2.3 looks at the offset projects which have been or are being implemented, paying particular attention to the developed offset companies, including the three companies selected as the setting for the empirical research project. Section 2.4 examines the administration of the overall Program, looking particularly at the institutions the government has established to oversee it and the development guidelines these institutions have put in place. Section 2.5 assesses the achievements of the Economic Offset Program to date. Finally, Section 2.6 looks at the possible consequences of recent and emerging trends that relate to the Economic Offset Program.

## **2.2 The Individual Offset Programs**

As noted previously, up to this point in time, the Kingdom of Saudi Arabia has developed seven different economic offset programs within the context of the overall Economic Offset Program. These have involved contractors from the United States of America, the United Kingdom, and France. Table 2.1 presents a summary listing of these programs. The rest of this section presents more detailed descriptions of, and information concerning, each of the individual offset programs.

**Table 2.1: Saudi Arabia-Economic Offset Programs and Contractors**

Offset Programme	Prime Contractor	Associated Contract		
		Year Signed	Description	Value (US\$ Million)
Peace Shield I	The Boeing Co	1984	AWACS Platform Command Control and Communications Systems for the RSAF	2,000
Al-Yamamah	British Aerospace (BAe)	1986 (I) 1988 (II)	Tactical fighter aircraft, associated equipment and services, and airbase construction for the RSAF	7,600
Peace Shield II	Hughes Aircraft Co.	1991	Extension of the Peace Shield Program	837
General Dynamics Economic Balance Program	General Dynamics Corp.	1992	Supply of M1A2 Abrams Main Battle Tanks and associated equipment for the Royal Saudi Land Forces (RSLF)	
McDonnell Douglas Peace Sun IX	McDonnell Douglas Corp	1993	Supply of F-15 fighter aircraft and associated equipment and systems for the RSAF	
Al-Sawari	Thompson-CSF	1994	Supply of frigates and associated weapons systems for the Royal Saudi Naval Forces	3,500
AT&T Offset	AT&T International	1994	Sixth Telecommunication Expansion Project (TEP-6) for 1.5 million new telephone lines and 200,000 GSM lines	6,000
Source: Compiled by The Economic Bureau*				

### 2.2.1 Peace Shield I Offset Program

The concept of economic offset was first applied in the Kingdom in 1984 to the US \$5.6 billion contract for the Peace Shield Project. The project involved establishing an air defence shield for Saudi Arabia, centring on a fleet of giant Airborne Warning and Control Systems (AWACS) aircraft, and an extensive complementary command, control and communication system. Four US companies (i.e., Boeing, GE, IT&T and Westinghouse) were the major sponsors of the project (Arab News, 1992).

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\* **The Economic Bureau** is a leading consulting firm headquartered in Riyadh, Saudi Arabia. It carries out market surveys, feasibility studies, strategic planning and other specialised management consulting services as well as macro-economic, social and policy oriented studies.

The associated Peace Shield I Offset Program called for the re-investment of 35% of the technical value of the Peace Shield contract into advanced joint ventures with Saudi private sector investors. Principally, the program envisaged the setting up and operation of a comprehensive aerospace industrial complex adjacent to the King Khalid International Airport (KKIA) to provide the Kingdom with its own leading-edge capabilities in aircraft repair and modification, component and electronics manufacturing and repair, and computer systems engineering technology.

As the Kingdom's initial offset program, the Peace Shield I Offset Program had highly focused goals and objectives, namely: 1) the development of high-tech industries and services, particularly technological know-how and expertise for the support of the Kingdom's high-technology defence system; 2) technology transfer; and 3) private sector investment formation, by requiring 50% Saudi ownership in joint venture project undertakings.

The Peace Shield I Offset Program originally involved an anticipated total of 11 projects with a combined investment of up to US\$700 million -about 35% of the value of the technical content of the Peace Shield contract. Of these 11 projects, ten were being put together by a consortium of Peace Shield contractors which managed the program-i.e., the Boeing Industrial Technology Group (BITG), a limited partnership including the Boeing Co. (49%), Northrop Grumman Corp. (16%), ITT (11%), and several other companies (i.e., Westinghouse, United Support and Services Co., and the Saudi Amoudi Group). The other project was being promoted by General Electric (GE), which, within

the framework of the Peace Shield program, had an offset commitment as a result of a radar contract. (Al Yamamah Magazine, 1998)

Of the ten BITG projects, four advanced through the implementation stages and were set up during the period from 1988 to 1989. These were: 1) Advanced Electronics Co. (AEC); 2) Al Salam Aircraft Co.; 3) Aircraft Accessories and Components Co. (AACC); and 4) International Systems Engineering (ISE). The project promoted by GE - i.e., the Middle East Propulsion Co. (MEPC) - is still in the process of implementation as the fifth Peace Shield offset project. (Al Yamamah Magazine, 1998)

In any country still at an early stage of development, like Saudi Arabia, advanced industrial projects, like the Peace Shield I offset projects, are bound to face numerous obstacles and difficulties. This reality affected all of the initial offset projects, which either suffered protracted delays in their implementation, or, in the case of the 6 other BITG-promoted projects, did not progress through the implementation stage at all.

The single most important factor hindering the implementation of the Peace Shield I Offset Program was the unfavourable economic conditions that prevailed in Saudi Arabia at the time. The launching of the Peace Shield program coincided with the onset of an economic recession brought about by a crash in oil prices. For this reason, the Saudi government, which was responsible for the development of the site and infrastructures in the high-technology industrial park at the King Khalid International Airport in Riyadh, started site preparation work only in 1989. Needless to say, the Gulf crisis of 1990-1991, though a major contributing influence to the development of some

of the subsequent individual offset programs (i.e., McDonnell Douglas' and General Dynamics'), adversely impacted the Peace Shield program. The financial burden that the war imposed on the Saudi government triggered payment delays and a significant slow-down in defence and defence-related expenditures. (Iktisadiyat, 1998)

Additionally, the high technological content and the specified investment requirements associated with the initial Peace Shield I projects presented a number of significant challenges with respect to putting the joint ventures together. As events actually developed, some of the major obstacles and difficulties faced by the initial Peace Shield I offset projects included the following:

1. forging partnerships among foreign investors and technology suppliers, who, in some cases, are keen rivals (e.g., General Electric, Pratt & Whitney and Rolls Royce in the MEPC project);
2. finding financially capable Saudi joint venture partners;
3. designing suitable corporate structures;
4. drawing-up long-term technology transfer agreements;
5. obtaining commercial licensing arrangements;
6. coping with changes in the composition of the Saudi Arabian Investing Group (and ownership structures) (e.g., late entries by such investors as Saudia and GIC);
7. meeting specialised construction requirements;
8. securing contracts vital for the support of the early development of the ventures; and
9. recruiting sufficiently skilled technicians, engineers, and managers.

Information concerning the five Peace Shield I offset projects that progressed to the implementation stage and have been developed into operational offset companies will be provided in Section 2.3.1.

### **2.2.2 Al Yamamah Offset Program**

The British offset program developed out of the Project called "Al Yamamah," initiated in September 1985, under the terms of which the Royal Saudi Air Force (RSAF) would acquire Tornado, Hawk and PC-9 aircraft, together with associated weapons, equipment and support. The agreement was executed by the governments of England and the Kingdom in 1986, with British Aerospace (BAe) as the prime contractor. Unlike the US Peace Shield Command and Control Program, however, the 1986 Al Yamamah agreement did not include offset commitment. Subsequently, the two countries negotiated an offset program, culminating in the signing, in late 1987, of a memorandum of understanding setting forth a very general framework for the Al Yamamah Offset Program (Iktisadiyat, 1998)

The Al Yamamah Project was the subject of a major enhancement in July 1988 involving the supply of additional aircraft, an air base construction program and specialised naval vessels (i.e., mine-sweepers). The expansion of the Al Yamamah Project in 1988 contained an offset commitment calling for the investment into the Kingdom of 25% of the value of the British components of the Al Yamamah contracts.

The Al-Yamamah Offset Program, which was launched in 1989, is broadly based and flexible so as to provide maximum benefit to both Britain and Saudi Arabia. Its goal is



to develop projects that complement the military and civil sides of the Al Yamamah accords. Consequently, offset investments are not limited to the Al-Yamamah contractors, and are not limited to specific pre-defined projects. Effectively, investments can be made in any non-oil business sector, including industrial, commercial and financial projects, with joint ventures in both the defence and civil sectors being particularly encouraged. The program includes assistance to commercial venture activities, such as technology transfer, licensing, training and all forms of commercial expansion and enhancement of existing ventures. Projects must be commercially viable, as losses will not be underwritten by either government. By design, the Al Yamamah Offset Program is expected to play an important role in commercial relations between the two countries for many years to come, by providing substantial long-term incentives to British companies looking to do business in Saudi Arabia.

Under this program, the qualified projects consist of new industrial/commercial activities and additions to existing activities involving private sector companies, provided that these activities support one or more of the following objectives:

1. involve a transfer of technology through research, development, manufacturing or production processes;
2. make good use of Saudi Arabian natural resources, including capital and energy;
3. result in the development of experienced Saudi technical, professional and managerial staff;
4. fit well with existing or planned industrial ventures in Saudi Arabia;
5. manufacture products which will substitute for Saudi imports;
6. manufacture products in Saudi Arabia which have an export potential;

7. establish service industries which enhance, develop, support or maintain the Saudi Arabian economic infrastructure; and
8. maintain and develop the UK industrial and commercial contribution to the development of the Saudi industrial sector.

Joint venture projects that have been implemented, or are currently being implemented, under the auspices of the Al Yamamah Offset Program consist of the following: 1) Glaxo Saudi Arabia; 2) United Sugar Company (USC); 3) Saudi Development & Training Co. (SDTC); 4) Cyclar Project; 5) Dhahran Harco Chemical Industries Ltd. (DCI-Harco); 6) Rezayat Flover Co. Ltd.; and 7) Cumene Manufacturing Facility Project (Offset Newsletter, 1997). Further information on these projects will be provided in Section 2.3.2.

In addition, investments made by BAe in the AACC, a Peace Shield offset company, and by Rolls Royce in the MEPC, another Peace Shield offset company, formed part of the offset commitments under the Al Yamamah Offset Program. Furthermore, and also as part of its offset commitment, BAe was instrumental with respect to the successful conduct of negotiations for the technology licensing agreement between the Saudi Basic Industries Corp. (Sabic) and the technology providers - UOP of the US and British Petroleum (BP) of the UK - for the aromatics plant of Sabic at the Ibn Rushd complex in Yanbu. (Offset Newsletter, 1997)

To finance the Al Yamamah defence purchases, the Kingdom allocated crude oil. Under the terms of the Al Yamamah Program, two-thirds of the oil were initially marketed by

the Royal Dutch/Shell Group and one-third by British Petroleum (BP). The proceeds from the sale were then deposited in a Bank of England trust account and released to BAe, the main contractor on the Al Yamamah Program. At the end of 1996, Saudi ARAMCO took over control over the sale of this crude oil allocation. (Offset Newsletter, 1997)

In addition to the existing range of investment incentives for companies setting up industrial projects in Saudi Arabia, BAe, in a new initiative, has developed a joint venture "soft" financing facility which will lower investment risks and enhance business returns, thereby yielding significant financial incentives for technology holders to invest in the Kingdom through the Al-Yamamah Economic Offset Program. For the initial stage of operation of this new facility, BAe set up a SR 65 million fund in November 1997. (Offset Newsletter, 1997)

Under this initiative, a bank facility may be arranged by BAe to provide technology holders with non-recourse loans for up to 50% of the value of their equity stake in an offset joint venture. In addition, BAe may also arrange a portion of the "parent company" guarantee required to support the joint venture's commercial debt financing, also on a non-recourse basis. Through this arrangement, BAe is effectively sharing the risk of business investment with the technology holder, while at the same time allowing management freedom and an enhanced return potential. It is intended that this new initiative will lead to greater investment and technology transfer in Saudi Arabia through the Al -Yamamah Economic Offset Program. (Offset Newsletter, 1997)

### **2.2.3 Peace Shield II Offset Program**

In July 1991, Hughes Aircraft Co. of the US won the US \$837 million contract for the second phase of the Peace Shield Program, taking over from the Boeing Co. Hughes Aircraft accepted the same offset terms that Boeing had agreed to. By 1995, the company had fully installed the Peace Shield air defence system, a nation-wide network of radar stations and command centres, and, since then, has been providing maintenance and operational support. Under a US\$262 million contract with the US Air Force Electronics Systems Centre, Hughes Aircraft provides technical back-up and training services to the RSAF with respect to the operations, management and training needs involved in running this air defence system. In September 1997, the company's contract was extended a further 7 months, which extension was valued at US\$ 120 million (Jime Review, 1998).

In fulfilment of its offset commitment, Hughes Aircraft Co.:

1. implemented an automotive battery manufacturing project, i.e., the Middle East Battery Co. (MEBC), carried out by General Motors (GM) in joint venture with a consortium of Saudi investors;
2. awarded a SR 24 million (US\$6.4 million) contract to AEC for the manufacture and supply of low voltage power supplies (LVPS) for the APG 7 radar sets used in F-15 aircraft;
3. bought a stake in ISE, one of the original Peace Shield offset companies; and
4. pledged a venture capital fund for joint venture projects developed by Devcorp International over a 10-year period.

Additional information on the MEBC project will be provided in Section 2.3.3

#### **2.2.4 General Dynamics Economic Balance Program**

After the offset commitments made by the Boeing Co. (in the context of the Peace Shield I Offset Program) and its successor, Hughes Aircraft Co. (in the context of the Peace Shield II Offset Program), other US companies involved in defence sales to Saudi Arabia have made their own offset arrangements with the Kingdom. In the aftermath of the Gulf War in 1991, there was a surge in US defence equipment sales to the Gulf region. The powerful impression created by US weaponry used during the Gulf War, coupled with the persuasive powers of a triumphant US government with political debts to collect, tipped the scales strongly in favour of US suppliers. Saudi Arabia ordered M1A2 Abrams Main Battle Tanks (MBT) from General Dynamics Corp. (GDC) of the US in 1992 and seventy-two F-15 fighter aircraft from McDonnell Douglas Corp., also of the US, in November 1993. (Al Yamamah Magazine, 1998).

As part of the sale of M1A2 tanks to Saudi Arabia, GDC agreed to participate in an "Economic Balance Program" whereby GDC would make a "good faith effort" to pursue investment opportunities in the Kingdom. However, no minimum percentage of contract value was set and no fixed standards were applied regarding such investments. As part of its commitment, GDC has: 1) implemented a project in the environmental sector; and 2) awarded several contracts to AEC (Al Yamamah Magazine, 1998).

### **2.2.5 McDonnell Douglas Offset Program**

As part of its contract for the supply of F-15 fighter aircraft to the Kingdom, McDonnell Douglas Corp. entered into an offset agreement whereby the Company committed to submit specific proposals to enter into business relationships with the 5 Peace Shield offset companies, namely:

1. AEC for the manufacture of military/commercial aircraft electronic systems and sub-systems;
2. Al Salam Aircraft Co. for the manufacture and overhaul of military/commercial aircraft components;
3. AACC for the manufacture and overhaul of military/commercial accessories and components;
4. ISE for the development and maintenance of military/commercial aerospace and ground system software; and
5. MEPC for the manufacture and overhaul of military/commercial aircraft engines and engine parts.

In addition, McDonnell Douglas also agreed to examine and pursue other business arrangements - including, but not limited to, joint ventures and technology transfers, particularly research and development- that would enhance the success of the company's business relationships with the above-named Peace Shield offset companies. As part of its commitment, the company has awarded 5 contracts to AEC for the manufacture of various avionics products and electronic sub-systems for the F-15 aircraft, and a contract to Al Salam Aircraft Co. for aircraft maintenance. More information on these

contracts is presented in Section 2.3.1, which looks at the Peace Shield offset companies (Electronic Defence, 1997).

### **2.2.6 Sawari Offset Program**

The French offset program agreement was signed in 1990, although the FF 19,000 million contract (i.e., Sawari II) for the supply of two Lafayette class frigates to the Saudi navy was signed only in November 1994. The prime contractor for this deal, which will also supply radar, electronic warfare systems, communications and Crotale missiles for the ships, is Thompson CSF. The offset commitment under the Sawari Program is to invest 35% of contract's technical value in any business sector, except oil. In May 1997, as an extension to the Sawari II contract concluded in 1994, Saudi Arabia agreed to purchase a third frigate from France and to have it, along with the previous two frigates, equipped with modern air defence systems.

As part of its offset commitment, Thompson CSF has implemented three offset projects, namely: (1) the Dahab Co. Ltd., (2) the Al Bilad Catalyst Co. Ltd., and (3) the Arabian Meter Co. Additionally, Thompson CSF has indicated that it is presently working on the evaluation and development of a number of prospective Sawari offset projects that include: (1) a US\$ 100 million downstream petrochemical project, (2) a SR 60-70 million refinery plant project, and (3) the setting up of a technical training institute (Iktisadiyat, 1998). More information on the Sawari offset projects will be supplied in Section 2.3.4.

### **2.2.7 AT & T Offset Program**

The first non-military government project in Saudi Arabia to include an offset obligation is the US\$ 6 billion contract awarded by the Ministry of Post, Telegraph and Telephone (PTT) to AT&T of the US (the relevant division is now known as Lucent Technologies) in August 1994 for the Ministry's sixth telephone expansion project (TEP-6). At the same time, AT&T also received a separate US\$404 million contract for the installation of the global standard for mobiles (GSM) system. The TEP-6 calls for the supply of a fully digital communications network including 1.5 million new digital lines, 200,000 cellular lines and thousands of associated network components through the year 2001.(Gulf News,1995)

In the agreement, AT&T has pledged to invest US\$ 300-400 million in offset projects, with a particular focus on equity investments, technology transfer, and training. The company has announced plans for three potential projects, under this offset program, namely: 1) an electronic circuit plant in partnership with AEC; 2) an operations and systems expertise centre in partnership with ISE; and 3) a copper & fibre optic apparatus plant. Within the purview of its offset commitments, AT&T, in early 1995, awarded a US\$252 million contract to AEC for the supply of printed circuit boards (PCBs) and fixed cabinets, along with the assembly and systems integration of AT&T's 5ESS (R)-2000 switch and transmission systems for the TEP-6 project. In addition, AT&T also awarded contracts to ISE for the production of operations systems software for the TEP-6 network.(CommsMEA,1996).



## **2.3 The Economic Offset Projects**

In the respective discussions of the individual offset programs in the preceding section, the actual investment projects associated with each program were mentioned. Table 2.2 presents a summary listing of the various joint venture projects carried out thus far under the auspices of these offset programs. The listings include contracts awarded to existing offset companies as part of the contractors' offset commitment. In this section, further information on the individual economic offset projects is presented (Saudi Commerce & Economic Review, 1998).

**Table 2.2: Saudi Arabia – Economic Offset Projects**

Name of Project/ Venture Entity	Joint Venture Partners/ (Share in Equity)	Line of Business	Project Location	Project Cost	Status
<b>PEACE SHIELD I OFFSET PROGRAM</b>					
Advanced Electronics Co (AEC)	Boeing Industrial Technology Group (BITG) - 10%; Arabic Computer Systems - 10%; Gulf Investment Corp. (GIC) - 10%; National Commercial Bank (NCB) - 10%; National Industrialization Co (NIC) - 10%; Saudi Arabian Airlines (Saudia) - 10%	Manufacture and repair of advanced electronic equipment (e.g., military and telecommunication equipment, avionics, and electronic equipment & systems) and technical services across a wide spectrum at the electronics field	KKIA Riyadh	US\$230 Million	Operational
Al Salam Aircraft Co. Ltd	BITG (50%) Saudia (25%), GIC (10%), NIC (10%), and Saudi Advanced Industries Co. (SAIC)-5%	Modification, manufacture, remanufacture, assembly, repair, maintenance and overhaul of military, commercial and civil rotary and fixed-wing aircraft	KKIA Riyadh	US\$159 Million	Operational
Aircraft Accessories and Components Co.* (AACC)	BITG and British Aerospace (BAe)-50%; Arabian Aircraft Services Co. (Arabasco)-30 %; Saudia 10% and SAIC (10%)	Repair and overhaul of critical aircraft systems: inflight control, pneumatics, life support, fuel and hydraulics	KKIA Riyadh	SR46.6 Million	Operational
International Systems Engineering (ISE)	BITG and Hughes Aircraft Co. (50%); United Systems Engineering (50%)-consortium of 6 Saudi software companies, namely: (1) Advanced Systems Co., (2) Al Khaleej Computers, (3) Arabia Data Systems, (4) CAP Saudi Arabia, (5) Modern Electronics Systems, and (5) Saudi National Information Systems	Computing system projects in the military, government and commercial sectors	Riyadh	US\$20 Million	Operational
Middle East Propulsion Co. (MEPC)	Foreign Partners: General Electric (GE), Pratt & Whitney and Rolls Royce (RR); Saudi Partners: GIC, NIC, SAIC and Saudia	Maintenance, repair, and overhaul of gas turbine engines and their components	KKIA Riyadh	SR 195 Million	Operational
<b>PEACE SHIELD II OFFSET PROGRAM</b>					
Middle East Battery Co.	General Motors (GM) – 49%; and 6 Saudi companies holding the remaining 51%, namely: (1) Abdulaziz & Mohammed Abdullah Al Jomaih Co., (2) Abdullatif Ali Al-Issa Est., (3) Al-Mutlaq Group, (4) H.A. Al Zamil & Bros., (5) Omar A Balubaid Co., and (6) Saudi Automotive Services Co. (Sasco)	Automotive battery manufacturing	Dammam	SR225 Million	Operational

Name of Project/ Venture Entity	Joint Venture Partners/ (Share in Equity)	Line of Business	Project Location	Project Cost	Status
<b>AL-YAMAMAH OFFSET PROGRAM*</b>					
United Sugar Co. (USC)	Tate & Lyle (15%), Savola CO. (51%) and a consortium of 15 Saudi sugar traders	500,000 tpy sugar refinery plant	Jeddah	SR600 Million	Operational
Glaxo Saudi Arabia Ltd.. (GSAL)	Glaxo Wellcome (UK) and Saudi Imports Co (SIC)	Manufacture of pharmaceutical products, including Glaxo's best known products (e.g., Zantac, Serevent and Zofran)	Jeddah	SR 98 Million	Operational
Saudi Development and Training Co. (SDTC)	British Aerospace (BAe) and Yusuf Bin Ahmed Kannco	Specialist Training Center: Computer & Vocational Skills; Techniques in job analysis, employee assessment, training needs analysis, and training packages	Dammam	SR 12 Million	Operational
Cyclar Project	Licensing agreement between Saudi Basic Industries Corp. (Sabic) and technology suppliers UOP and BP	Supply of technology for the Cyclar Plant at Sabic's aromatic plant in Yanbu	Yanbu		Under Construction
Cumene Manufacturing Project	Universal Petrochemical Co. Ltd. (Unichem), Phenolchemie (Germany), and Herdilla (India)	Cumene manufacturing facility	Yanbu	US \$60 Million	Negotiation Stage
Dhahran Harco Chemical Inds. Ltd.	Harlow Chemical Co. Ltd. (Harco) and Dhahran Chemical Industries Ltd. (DCI)	Manufacture of a range of dispersion products used in the paint and adhesive industries	Dammam		Under Implementation
Rezayat Flover CO. Ltd.	Flover Ltd. And Rezayet Trading Co.	Repair or remanufacture of instrumentation equipment across the range of Saudi industry	Eastern Province		Under Implementation
<b>SAWARI OFFSET PROGRAM</b>					
Dhabab Co. Ltd.	Thompson CSF (49%) and Saudi investors (51%)	110 tpy gold refinery	Jeddah	SR 43 Million	Operational
Al Bilad Catalysts Co. Ltd.	European Catalyst (Eurocat) (35%), Al Bilad Trading & Econ. Est. (20%), and National Contracting Co. (20%)	Regeneration of hydro-treating catalysts used in oil refineries and petrochemical units	Jubail		Operational
Arabian Meter Co.	Market Trading Co.	Manufacture of Electric Meters (90,000 units/year)	Dammam		Operational

Name of Project/ Venture Entity	Joint Venture Partners/ (Share in Equity)	Line of Business	Project Location	Project Cost	Status
<b>CONTRACTS AWARDED TO OFFSET COMPANIES</b>					
Peace Shield II	Hughes Aircraft Co.	Manufacture of low voltage power supply (LVPS) for the APG 7 radar sets for use in F-15 Aircraft		SR 24 Million	
General Dynamics Offset Program	General Dynamics / AEC	Manufacture of printed circuit boards (PCBs) and LRUs for the M1A2 Abrams Main Battle Tanks		SR 183.6 Million	
	Smith Industries; AEC	Production of the position/navigation system for the M1A2		SR 31.9 Million	
McDonnell Douglas Offset Program	McDonnell Douglas / AEC	Production of avionics modules for the F-15 aircraft		SR 3.2 Million	
	McDonnell Douglas / AEC	Surface Mount Technology (SMT) Transfer: Manufacturing Equipment Line		SR 204.4 Million	
	Smiths Industries / AEC	Manufacture of standard flight data recorder (SFDR) system for the F-15 aircraft		SR 31.9 Million	
	Northrup Grumman Corp. / AEC	Production of Pre-Amplifier sub-assembly for the F-15		SR 25.5 Million	
	Hughes Aircraft Co./ AEC	Assembly and testing of Low Voltage Power Supply (LVPS) modules for the F-15 aircraft		SR 24.4 Million	
	McDonnell Douglas / Al Salam Aircraft Co.	Assignment of 72% of the technical support services for the F-15 aircraft for 3 years		SR 400 Million	
AT&T Offset Program	AT&T / AEC	Manufacture of PCBs for assembling 5ESS (R)-2000 switch and transmission systems for the TEP-6 Project		US\$ 252 Million	
<p><b>NOTES:</b> BITG is comprised of Boeing, Westinghouse, the Saudi Amoudi Group, FTT and United Support and Services (a joint venture of the US Frank E. Basil and Saudi Operations &amp; Maintenance Co. Inc.)</p> <p>* Investments by BAe and Rolls Royce in two Peace Shield offset companies (i.e. AACC and MBPC, respectively) are under the Al-Yamamah offset commitment</p> <p><b>SOURCE:</b> Compiled by The Economic Bureau</p>					

### **2.3.1 The Peace Shield I Offset Companies**

The first five offset companies were the high-technology joint ventures set up by the BITG and General Electric in the context of the Peace Shield I Offset Program: 1) Advanced Electronics Co. (AEC); 2) Al Salam Aircraft Co.; 3) International Systems Engineering (ISE); 4) Aircraft Accessories & Components Co (AACC); and (5) Middle East Propulsion Co. (MEPC) (EOS Publications, 1996).

#### ***1) Advanced Electronics Co. (AEC)***

AEC, the largest defence offset company, was established in 1988. Its function is to provide the advanced electronics capability, especially in terms of local maintenance and support, required for the self-sufficiency and operational readiness of Saudi Arabia's sophisticated military and civil aviation systems. With 19,000 sq. m. of state-of-the-art office and manufacturing facilities located in a 300,000 sq.m. site at the KKIA Aerospace Industrial Park, Riyadh, AEC's activities involve: 1) the design, manufacture, assembly, systems integration and testing of advanced electronic equipment, systems and components; 2) systems implementation; and 3) support services (i.e., repair, technical support, training, and field services) (AEC Publications, 1998).

Examples of manufacturing programs at AEC include prestigious contracts on a wide range of military programs such as: 1) M1A2 tank electronics; 2) F15-S and F-16 avionics; 3) Paveway laser guided bombs; 4) CDU-800 avionics for military aircraft; 5) tactical radios for Panther V, M1A2 tanks, Bradley Fighting Vehicles, MOWAG light attack vehicles, Apache helicopters and the Patriot air defence system; 6) ALQ-135 band 1.5 equipment to the USAF; 7) chaff and flare countermeasures for military

aircraft; and (8) Precision Lightweight GPS Receivers (PLGR) (Military Technology, 1996).

Notable non-military manufacturing programs include: 1) smart card payphones; and 2) PCBs, cabinets, and systems integration and testing for the most advanced telecommunication switches, as part of a major contract with Lucent Technologies for the Telephone Expansion Program (TEP-6) under the auspices of the Saudi Ministry of PTT (Middle East communications, 1997).

AEC has a strong manufacturing, engineering and manpower base (i.e., 380 employees, of whom 63% are Saudi nationals). Built through technology transfers from Westinghouse and other licensors, joint projects, collaborative license manufacture, and training, these strengths have established AEC as the only company in the Kingdom (and, for that matter, in the entire Gulf region) capable of manufacturing advanced military and civil electronic systems in accordance with international commercial and military standards. AEC is certified as follows: 1) MIL-45208A; 2) MIL-STD45662A; 3) MIL-STD-2000A; 4) MIL-STD-1686; and 5) ISO 9002. It received the International Excellence Source Control award, given by the Lockheed Martin Quality Organisation to international companies that have maintained an outstanding level of performance for more than one year (Arab News, 1998).

AEC's prestigious customers include: 1) Boeing Middle East Ltd.; 2) General Dynamics Land Systems; 3) Hughes Aircraft Co.; 4) ITT Corp.; 5) Lockheed Martin Tactical Aircraft Systems (LMTAS); 6) Loral; 7) Lucent Technologies; 8) McDonnell Douglas; 9) The Kuwaiti Ministry of Communications; 10) The Saudi Ministry of the Interior;

11) The Saudi Ministry of Post, Telegraph and Telephone; 12) MOWAG; 13) Northrop Grumman Corp.; 14) Procom Associates, Inc.; 15) Raytheon; 16) Rockwell International; 17) The Royal Saudi Armed Forces; 18) The Saudi Presidency of Civil Aviation; 19) Smiths Industries; 20) Texas Instruments; 21) United Defence (FMW/BMY); 22) The US Army CECOM; and 23) The US Navy (Riyadh Daily, 1996).

AEC's paid-up capital of SR 110.5 million is distributed as follows: BITG -50%; National Industrialisation Co. (NIC) - 15%; Gulf Investment Corp. (GIC) - 15%; National Commercial Bank (NCB) - 10%; and Saudi Arabian Airlines (Saudia) - 10% (AEC Publications, 1998).

## **2) *Al Salam Aircraft Co. (ASAC)***

Founded in 1989, the Al Salam Aircraft Co. is chartered to modify, manufacture, remanufacture, assemble, repair, maintain and overhaul military, commercial and civil rotary and fixed wing aircraft. Benefiting from Boeing technology (i.e., on airframe modification, composite material design and manufacture, and rotary blade technology), the Company was envisaged as a centre for aircraft heavy maintenance in the Kingdom and the Gulf region.

The company occupies 420,000 sq. m. of state-of-the-art hangar bays, offices and auxiliary buildings in a 565,000 sq. m. site at KKIA Aerospace Industrial Park. Its 3 hangar bays can each accommodate one wide body aircraft such as the Boeing 747 and 777, or multiples of smaller aircraft, such as the Boeing 737 or Lockheed C-130. Any commercial airplane in the world can be accommodated at this facility. Its aircraft heavy

maintenance facilities, with suspended docking systems and core shops equipped to support maintenance, aircraft modification and in some cases manufacturing, are the most modern of this type in the world today (Arab News, 1998).

Some of Al Salam's major contract awards include the following:

1. A contract with Saudia for heavy maintenance on the national airline's fleet, starting in 1995;
2. A contract, signed in May 1997, for the provision of technical assistance, maintenance services and specialised manpower to the RSAF for its F-15 fighter planes for a period of 3 years;
3. A contract, valued at SR 400 million, signed in May 1997 with the US' McDonnell Douglas, which assigned a percentage of technical support services for F-15 fighter jets to Al Salam for a period of 3 years;
4. A contract with BAe, signed in September 1996, for programmed depot maintenance work on the Tornado aircraft in service with the RSAF for a 5-year period and covering the substantial overhaul, replacement and testing of all components;
5. A contract with McDonnell Douglas for the maintenance of AWACS and KC-135 tanker planes;
6. A contract with Lockheed Co. for the maintenance of C-130 aircraft; and
7. A contract with Saudi ARAMCO for the maintenance of its fleet of 22 helicopters, five B737s and three F-27s.

The above contracts demonstrate the growing confidence placed in the capabilities of Al Salam by its clients. Al Salam is the only major aircraft repair facility in the region to



receive FAA repair station certification, attesting that the company's maintenance facility meets the highest standards in the world.

While the transfer of US technology to this facility was the major objective, one of the basic aims of the project was to implement the Kingdom's policy of Saudisation. In 1994, the total workforce at Al Salam reached 1,600 (including aircraft technicians, administrative and management personnel). So far, 60% of the leading positions in the company and 30% of the technical positions have been Saudised.

With a paid-up capital of SR 162 million, the joint venture partners in Al Salam consist of: BITG-50%; Saudia-25%; NIC-10%; GIC-10%; and the Saudi Advanced Industries Co. (SAIC)-5% (ASAC Publications, 1998).

### ***3) International Systems Engineering (ISE)***

Another high-technology joint venture project implemented by the BITG, as part of its offset commitment, is the International Systems Engineering Co. (ISE). Drawing on the proven technology and know-how of Boeing Computer Services (BCS), which has established similar service operations in the US and Europe, ISE was established in order to develop the local computer and information technology (IT) service expertise required for managing complete large-scale computing systems projects for military, government and commercial needs, thereby lessening dependence on imported systems engineering support.

ISE aims to offer full-spectrum services, as follows: 1) software systems engineering; 2) network services engineering; 3) software and hardware maintenance; 4) network

maintenance; 5) information processing; 6) computer facilities management; 7) education and training services; and 8) software products and services (ISE Publications, 1998).

ISE draws from and builds upon the capabilities of the six Saudi partners, who comprise the United Systems Engineering Co. (USEC), as follows: 1) Advanced Systems Company; 2) Arabian Data Systems; 3) CAP Saudi Arabia; 4) Modern Electronics Systems Co.; 5) Saudi National Information Systems; and 6) Al Khaleej Computers. Until Hughes Aircraft Co.'s buy-in, the BITG and USEC equally shared ownership of ISE.

ISE has been involved in military programs established under the offset programs. The company's two main contracts involve support for the AWACS/tanker fleet and a joint venture with Thompson CSF to support the air traffic control system at the Kingdom's newest international airport, the King Fahd International Airport in the Eastern Province (ISE Publications, 1998).

#### ***4) Aircraft Accessories & Components Co. (AACC)***

The fourth high-technology joint venture operation set up in the Kingdom by the BITG under the Peace Shield I Offset Program is the Aircraft Accessories & Components Co. (AACC). This venture involves parts manufacturing, repair, overhaul and support services in the maintenance of critical precision systems for civil and military aircraft (e.g., in flight control, pneumatics, life support, fuel, propeller, air conditioning and hydraulics systems). Its facilities are located in a 100,000 sq.m. site at the KKIA Aerospace Industrial Complex in Riyadh (AACC Publications, 1998).

AACC has successfully achieved the international accreditation standards necessary to conduct business in the technologically challenging field of aircraft maintenance, and has gained ISO 9000 certification. The company initially concentrated on maintaining the Royal Saudi Air Force's (RSAF) extensive fleet of giant C-130 Hercules military transport aircraft.

The BITG owns 30% of the company's equity, with the following as partners: BAe (taking over the stake of British aerospace manufacturer, Dowty Group) -20%; Arabian Aircraft Services Co. (Arabasco)-30%; Saudia-10%; and Saudi Advanced Industries Co. (SAIC)-10%. The addition of Saudia has provided a welcome boost to the components scheme (AACC Publications, 1998).

#### ***5) Middle East Propulsion Co. (MEPC)***

The fifth Peace Shield offset company established in the Kingdom is the Middle East Propulsion Co. (MEPC) for the maintenance, repair, and overhaul of gas turbine engines and their components. This was organised by General Electric (GE), who hold a 25% stake in the company. GE's partners are: Pratt & Whitney (P&W)-25%; Saudia-25%; NIC-10%; GIC-10%; and SAIC-5%. In 1993, the UK's Rolls Royce took a stake in this Company under its separate Al Yamamah offset obligation.

Located at the KKIA Aerospace Industrial Park, MEPCO's facility is currently being developed in 3 phases. By drawing on the technological expertise and experience of the acknowledged world leaders in turbine engine manufacturing (i.e., GE, P&W and Rolls Royce), MEPC has established a strong potential for future growth (Iktisadiyat, 1998).

### **2.3.2 Al Yamamah Offset Projects**

Offset projects implemented, or in the process of being implemented, under the Al Yamamah Offset Program consist of: 1) Glaxo Saudi Arabia; 2) United Sugar Company (USC); 3) Saudi Development & Training Co. (SDTC); 4) Cyclar Project; 5) Dhahran Harco Chemical Industries Ltd. (DCI-Harco); 6) Rezayat Flover Co. Ltd.; and 7) Cumene Manufacturing Facility Project. In addition, the investment participation by BAe and Rolls Royce in the two Peace Shield offset projects (i.e., the AACC and MEPC, respectively), is also credited as being part of the Al Yamamah Offset Program commitment (Offset Newsletter, 1997).

#### ***1) Glaxo Saudi Arabia***

Glaxo Saudi Arabia is a joint venture between the UK's Glaxo Wellcome and the local Saudi Import Co., is the first manufacturing joint venture project set up under the Al Yamamah Economic Offset Program. With a project cost of SR 98 million (US\$26.5 million), it involved the setting up of an advanced pharmaceutical plant in Jeddah that would produce a full range of pharmaceuticals, including some of Glaxo's better known established products such as Zantac (a stomach acid blocker), Servant (an asthma treatment), and Zofran (which combats nausea). Plant construction was completed in September 1994, and production was originally scheduled to begin in mid-1995 but was held up until April 1996 by electricity problems and product registration delays.

The local market needs for pharmaceuticals are estimated to be SR 3,000 million (US\$800 million) a year. Of this, the factory is geared to meet 6%, with plans for export orientation to meet market requirements in the Gulf region. The plant's architectural,

structural and building service designs were carried out in the UK by Clean Design, while the main contractor in the construction was Allied Engineering Enterprises Saudi Arabia. The electro-mechanical contractor was Juffali, with Marchant Filer Dixon Arabia supervising the construction (Arab News, 1998).

## ***2) United Sugar Company (USC)***

This project involved the setting up of the Kingdom's first sugar refinery in Jeddah at a cost of SR 600 million. The refinery has a projected output capacity of 500,000 tons of white sugar per year, and is a joint venture between Tate & Lyle of the UK (15%), the local Savola Co. (51%), and a consortium of Saudi sugar traders (34%).

Commissioned in late 1996, the factory was officially opened in September 1997. Output of refined sugar was expected at about 375,000 tons in the first year, with full capacity of 500,000 t/y to be reached in 1998. About one-fifth of the total production is earmarked for export (Al Yamamah Magazine, 1998).

## ***3) Saudi Development & Training Co. (SDTC)***

This is a joint venture between BAe and Kanoo Group based in Dammam. The company was established to introduce "state-of-the-art" techniques in job analysis, employee assessment, training needs analysis, and training package delivery in formats appropriate to the Saudi environment. The basic concept of the company is that effective industrialisation can only be achieved if the workforce has high technical skill levels (Offset Newsletter, 1997).

#### ***4) Cyclar Project***

As noted in Section 2.2, BAe was instrumental with respect to the successful conduct of negotiations for the technology licensing agreement between Sabic and the technology providers ( i.e., UOP of the US and BP of the UK) for the aromatics plant of Sabic at the Ibn Rushd complex in Yanbu. The 730,000 t/y, US\$500-million aromatics plant will convert locally available LPG into benzene, ortho-xylene and para-xylene. Para-xylene is the feedstock needed to make pure terephthalic acid, which, in turn, is one of the two raw materials used to produce polyester. The other ingredient is ethylene glycol, which Sabic produces in large quantities at the neighbouring Yanpet plant. Construction of the aromatics plant, which was being carried out by Chiyoda Petrostar and Chiyoda Corp., was due to be completed in March 1998 (Al Yamamah Magazine, 1998).

#### ***5) Dhahran Harco Chemical Industries Ltd. (DCI-Harco)***

This is a joint venture between Harlow Chemical Co. Ltd. (Harco) and Dhahran Chemical Industries Ltd. (DCI). Harco itself is a joint venture between Hoechst and Yule Catto, and is a leading manufacturer and worldwide supplier of water based polymers to the surface coatings, adhesive and textile industries. The company has a strong presence and market share in the Middle East. DCI is the largest specialised emulsion polymer manufacturer in the GCC countries.

The DCI-Harco joint venture involves the manufacture of a range of water-based polymers and dispersion products used in the paint, adhesive and textile industries. The first Harco manufacturing facility outside the UK, it will be the largest manufacturer and supplier of dispersion products in the Middle East region, introducing Harco's

technology and promoting its international range of products, including the Viking range of polymers.

The new facility, with a projected capacity of 24,000 tons, was to be based at the existing 33,000 sq.m. DCI site in Dammam. The production facilities at the site were being significantly increased to facilitate the local manufacture of Harco's polymers (Offset Newsletter, 1997).

#### ***6) Rezayat Flover Co. Ltd.***

This is a joint venture between Flover Ltd. of the UK and the local Rezayat Trading Co. that involves the setting up of a facility in the Eastern Province for the repair or remanufacture of instrumentation equipment to ISO 9002 standards. The facility, which will replicate Flover's premises in Lancashire, UK, will enable client companies to save an average of 25% of the replacement cost, and will also cut down inactive plant time.

The new venture originally aims to service the Eastern Province, although it foresees expansion to other industrial areas within a few years. Rezayat is a leading player in the Kingdom's engineering, construction and maintenance sectors (Offset Newsletter, 1997).

#### ***7) Cumene Manufacturing Facility***

In a continuation of the successful efforts in relation to sourcing the technology for Ibn Rushd's aromatics plant in Yanbu, the British Offset Office has been working with the local Universal Petrochemical Co. Ltd. (Unichem) on plans for a 260,000 t/y, SR 225 million (US\$60 million) cumene manufacturing facility in Yanbu, using the Q-Max

technology developed by UOP of the US. Cumene, which chemists call isopropyl benzene, is converted into phenol and acetone and has become an important chemical gateway to a wide range of major products (e.g., polycarbonate, epoxy and phenolic resins). It is made from propylene and benzene. Negotiations have been taking place with Saudi ARAMCO for 100,000 t/y propylene supplies from the Saudi ARAMCO-Mobil Refinery (Samref) at Yanbu. The supply of 160,000 t/y of benzene would come from the cyclo plant under construction at Sabic's Ibn Rushd's complex, also in Yanbu. Partnership negotiations are also reportedly being finalised with Phenolchemie of Germany, the world's largest single producer of phenol, and Herdillia Chemicals, one of two producers of phenol in India. The project represents a significant diversification for the Saudi chemical industry, because cumene development is the first step towards phenol and acetone production in the Kingdom (Iktisadiyat, 1998).

### **2.3.3 Peace Shield II Offset Projects**

As noted in section 2.2.3, apart from its investment in ISE and its LPVS contract award to AEC, the only joint venture project carried out thus far by the Hughes Aircraft Co. as part of its offset commitment is the Middle East Battery Co. It must be emphasised, though, that under an arrangement worked out with the EOC\*, Hughes Aircraft has pledged annual contributions over 10 years to a venture capital fund intended to develop joint venture projects in the Kingdom, with Devcorp International handling investment project identification, evaluation and development (Arab News, 1998).

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\*The Economic Offset Committee: refer to Section 2.4 for a description of the EOC's composition and function.



As part of the offset commitment under the Peace Shield II Offset Program, Hughes Aircraft made arrangements for General Motors (GM) to set up an industrial joint venture in the Kingdom involving the local manufacture of automotive batteries. This development was attractive for GM as it was compatible with the company's global strategy for localising production. The joint venture established was named the Middle East Battery Co. (MEBC). Located in Dammam, MEBC began industrial operations in January 1998. The company will produce 500,000 batteries (AC Delco and Freedom brands) annually for passenger cars and other medium and heavy vehicles. The output will initially provide service to markets in the Kingdom and the GCC countries.

The venture obtained SR 85 million (US\$23 million) long-term loan financing from the SIDF. GM holds a 49% stake in the SR 210 million venture, with paid-up capitalisation of SR 100 million. The Saudi partners consist of the following: 1) H.A. Al Zamil Group of Companies; 2) Al Mutlaq; 3) Al Jomaih; 4) Alissa Group; 5) Al Balubaid Group; and 6) Saudi Automotive Services Co. (Sasco) (Iktisadiyat, 1998).

#### **2.3.4 Sawari Offset Projects**

As of this writing, three offset projects have been implemented under the Sawari Offset Program. These are: 1) Dahab Co. Ltd.; 2) Al Bilad Catalyst Co. Ltd.; and 3) Arabian Meter Co.

##### ***1) Dahab Co. Ltd.***

Dahab Co. Ltd. is a Saudi-French joint venture set up as part of the French Sawari Offset Program. The company's 100-t/y precious metals refinery in Jeddah, which is the first such facility in Saudi Arabia, refines, purifies and supplies pure gold and silver

ingots. The refinery utilizes state-of-the-art technology (i.e., basic "Aqua Regia Process" with electrolysis bath), treating and refining gold ores and gold scraps to the highest purity levels of 0.9999. The company aims to achieve the 'Good Delivery' standards of the London Bullion Market (LBM).(Arab News,1998). In addition to gold and silver ingots, the refinery also supplies semi-finished products to jewellery manufacturers (e.g., threads and wires, medals and laminated products, plates, mother alloys, welding rods, etc.).

The refineries' products are sold in Saudi Arabia, the GCC countries and other international markets. Saudi Arabia is one of the largest consumers of pure gold in the world.

The construction of the company's gold refinery was completed in November 1995, and industrial operations commenced in January 1996. Utilising ores from local sources, the refinery concluded its first sales in early May 1996 with the sale of silver in the local market.

Private Saudi investors hold 54% of the Company's SR 43 million equity, and France's Thompson CSF holds the balance 49%. The Saudi partners consist of: 1) Sheikh Majed Bin Ibrahim Al Ibrahim, who serves as Chairman of the company's Board of Directors; 2) Dr. Talal Al Shaer, the company's Managing Director; 3) Sheikh Mohamed Al Esayi; 4) Sheikh Abdullah Al Romaizan; and 5) Sheikh Aref Fahad Ahmad Abouras (Iktisadiyat, 1998).

## **2) *Al Bilad Catalyst Co. Ltd.***

Another Saudi-French joint venture established in the Kingdom under the Sawari Offset Program is the Al Bilad Catalyst Co. Ltd. Located in Jubail, the company's plant; carries out the regeneration of hydro-treating catalysts used in oil refineries and petrochemical units. Periodic catalyst regeneration, which removes the carbonaceous deposits that progressively build up on a catalyst's surface during normal use, reduces industrial waste and, therefore, enhances environmental protection and conservation.

The technology for this project is supplied by European Catalyst (Eurocat) of France, which has a 35% stake in the venture's equity. The other partners are led by Al Bilad Trading and Economic Establishment (20%) and the National Contracting Co. (20%). With a production capacity of 100 tons per month, the venture has been in operation since October 1994. The total workforce is 22, of which 7 are Saudi nationals. Al Bilad's customers are comprised of oil refineries and petrochemical plants in the Kingdom and the other GCC states. The company has also started to serve customers in Egypt. The company is presently studying the feasibility of installing a new furnace that will expand capacity to 400 tons per month (Iktisadiyat, 1998).

## **3) *Arabian Meter Co.***

The third Saudi-French industrial joint venture project set up in the Kingdom under the Sawari Offset Program is the Arabian Meter Co. Located in Dammam, this venture's factory produces electrical meters, with a production capacity of 90,000 units per year. Production operations commenced in January 1998. The future growth and development of this company will follow a progressive manufacturing scheme - i.e., from an initial assembly operation, it will progress to parts manufacturing (particularly plastic parts),

thereby increasing the local content of the product. The initial paid up capitalisation was SR 2 million, which was set to increase to SR 8 to 10 million over three years. (Iktisadiyat, 1998)

## **2.4 The Administration of the Saudi Economic Offset Program**

Generally speaking, the responsibility for implementing the Kingdom's Economic Offset Program has been assigned to the Ministry of Defence and Aviation (MODA), under the guidance of Prince Sultan bin Abdulaziz, the Second Deputy Premier and Minister of Defence and Aviation. On a more specific level, a number of distinct institutional units have been created to administer the existing individual offset programs and to oversee the development of future offset programs. In this section the institutional units will be identified and described, and the guidelines that have been established with respect to the development of future offset programs will be examined.

### **2.4.1 Institutional Units Involved in the Administration of the Economic Offset Program**

There are four institutional units involved in the administration of the Kingdom's Economic Offset Program. These are: 1) the Ministerial Committee; 2) the Economic Offset Committee (EOC); 3) the Economic Offset Secretariat (EOS); and 4) the Saudi-UK Joint Offset Team (EOS 25-3,1996).

#### ***1) Ministerial Committee***

With the view to providing a structure for the administration of the Economic Offset Program, the Saudi government appointed a Ministerial Committee headed by the Second Deputy Premier with the following 4 Ministers as members:

1. The Minister of Finance & National Economy;
2. The Minister of Industry & Electricity;
3. The Minister of Planning; and
4. The Minister of Commerce.

## ***2) Economic Offset Committee (EOC)***

Under the supervision by the Ministerial Committee, an executive committee, the Economic Offset Committee (EOC), was formed in 1989. The chairmanship of the committee is held by the Assistant Minister of Defence & Aviation for Civil Aviation.

The other members of the EOC consist of:

1. The Deputy Minister of Commerce;
2. The Deputy Minister of Industry for Industrial Affairs;
3. The Deputy Minister of Finance & National Economy for Economic Affairs and Director General of the Public Investment Fund (PIF);
4. The Assistant Deputy Minister of Finance & National Economy for Budget & Organisation;
5. The Deputy Chairman and Managing Director of the Saudi Basic Industries Corp. (Sabic); and
6. The Director General of the Saudi Industrial Development Fund (SIDF).

Within the confines of policy supervision established by the Ministerial Committee, the EOC effectively presides over the overall Saudi Economic Offset Program. It performs the following functions/activities:

1. develops and issues offset guidelines to provide a framework and reference point for negotiations with offset contractors;

2. determines the requirements for the programs;
3. approves investment proposals;
4. monitors the progress of the individual programs; and
5. approves all credits earned by the foreign contractors against their offset commitments (offset credits).

### ***3) Economic Offset Secretariat (EOS)***

For the purpose of implementing directions, monitoring individual programs and conducting necessary co-ordination among concerned parties within the government and the private sector, an Economic Offset Secretariat (EOS) has also been set up. Comprised of the EOC staff, the Secretariat's primary role is two-fold, namely: 1) to assist companies and individuals in their efforts to implement offset venture projects; and 2) to ensure that rapid and favourable consideration is given to offset venture proposals. (Al Yamamah Magazine,1998).

### ***4) Saudi-UK Joint Offset Team***

To focus the UK's commitment to extending business links with Saudi Arabia, the Saudi Ministry of Defence & Aviation (MODA) and BAe created a Joint Offset Team - known as the British Offset Office. This unit was charged with the responsibility of assisting new technology holders to identify and pursue the significant business opportunities that exist for joint ventures in the Kingdom. The Joint Team operates offices in the UK and Saudi Arabia, and through its Merchant Bank advisers (Robert Fleming & Co. Ltd. and Schroder Asseily & Co. Ltd.), it provides experienced consultation and information on how to do business in the Kingdom. In promoting the Al Yamamah Offset Program, the

British Offset Office holds round table discussions with key Saudi businessmen in each regional capital (i.e., Riyadh, Dammam and Jeddah) (Al Yamamah Magazine, 1998).

#### **2.4.2 Economic Offset Program Guidelines**

To provide a framework and reference point for the negotiations with offset contractors, as well as for administering the individual offset programs, the EOC has developed and issued a detailed set of Economic Offset Program Guidelines. It must be emphasised, however, that these guidelines have historically represented the EOC's 'desired' framework for offsets rather than being a rigid statement of non-negotiable rules and terms (EOS Publications, 1996). Hence, in connection with future negotiations, it is difficult to determine whether or not, or to what extent, the EOC will agree to offset terms that vary from the guidelines. The EOC's flexibility will depend, to some extent, on: 1) the size and nature of the contract on which the offset is based; and 2) the relative negotiating strengths of the parties (e.g., the importance of the contract to the contracting ministry, the availability, or lack thereof, of the specialised services or products being contracted for, the price being asked, etc.).

In this section, important aspects of the EOC Guidelines are briefly discussed in order to provide an understanding of the EOC's preferred framework for new offset obligations. The following areas will be examined: 1) the requirement of an offset commitment as part of future import contracts; 2) the amount of offset obligation; 3) qualifications for investment projects; 4) cash contributions to equity; 5) the designation of the investing entity; 6) shares in ownership; 7) the equity retention requirement; 8) the calculation of offset credits; 9) time limits; 10) failure to meet offset obligations; and 11) the taxation of offset investments.

### ***1) The Requirement of Offset Commitment***

The EOC Guidelines indicate that offset programs should be applied to all prospective non-Saudi contractors seeking "certain major contracts" from the Saudi government, whether direct or government-to-government, for the supply of goods and services. However, the guidelines do not present a specific definition concerning what constitutes a "major contract." Hence, it appears that future decisions about whether or not a particular contract will require an offset commitment will be made on a case-by-case basis by the EOC, by the relevant contracting ministry, or by some combination thereof.

In some cases in the past, the Saudi government, due to unusual payment terms and other circumstances, has waived the offset requirement. But, as part of the Kingdom's recently adopted "get-tough approach", Prince Fahad bin Abdullah, the Chairman of the EOC, announced in 1997 that there would be a total implementation of the offset requirement for all projects. The most likely candidates for offset obligations appear to be: 1) contracts for large projects in the defence sector; 2) contracts in areas targeted for privatisation (e.g., telecommunications, electricity, commercial air traffic, etc.); and (3) large civilian government contracts (EOS Publications, 1998).

### ***2) The Amount of Offset Obligation***

The EOC Guidelines state that the offset commitment of a contractor subject to the offset requirement should be set at 35% of the monetary value of the contract, computed in the same currency as the contract. Offset obligations exclude the costs of construction and personnel from the calculation. The guidelines further specify that, when the scope of work under a contract is changed, the contractor's 35% commitment will be applied



to the revised, rather than the original, value of the contract. Based on the percentages which have been applied to offset programs to date, it appears that, in practice, the nature and monetary level of the commitment may vary from case to case.

### ***3) Qualifications for Investment Projects***

Under the EOC Guidelines, the most desirable types of investment project for gaining offset credit consist of those that:

1. involve a significant degree of high technology;
2. contribute to the training of Saudi nationals in management and high technology; or
3. increase import substitution or provide export potential.

The EOC will consider either manufacturing or service projects that meet these criteria, although, under the current guidelines, at least 60% of a contractor's offset commitment should consist of manufacturing activities. Investments may be made through:

1. establishing new joint ventures in the Kingdom;
2. expanding or diversifying already existing joint ventures;
3. setting up jointly executed research and development programs that substantively contribute to the Kingdom's technological capabilities; or
4. funding training of Saudi nationals.

Based on recent experience with some programs (e.g., McDonnell Douglas, General Dynamics, and AT&T), it appears that projects that develop or contribute to the viability of existing offset companies are now also being encouraged.

#### ***4) Cash Contributions to Equity***

The EOC Guidelines require that cash contributions to equity in the aggregate equal at least 20% of the contractor's overall offset commitment. However, the guidelines also specify that, with respect to high-technology ventures, equity contributions can be satisfied either through: 1) in-kind contributions of technical know-how as equity investment in joint ventures and licensing agreements; or 2) the assignment of scientists, engineers and technicians to the joint ventures. The Saudi Companies Law allows in-kind equity contributions, including technology transfer. In this context, it should be noted that it has been the practice of concerned government ministries to require that all in-kind equity contributions be tangible. However, such in-kind equity contributions have thus far been unusual in practice. Consequently, with the support of the EOC: and/or the contracting ministry, it may be possible to get approval for intangible equity contributions.

#### ***5) The Designation of the Investing Entity***

The EOC Guidelines specifically allow for the designation and formation of a distinct entity that will act as the designated shareholder for a given contractor in offset companies formed under an offset program. For example, in the Peace Shield I Offset Program, The Boeing Co. formed the BITG, consisting of 3 US companies and 2 Saudi companies, for this purpose. The guidelines, however, additionally indicate that there should be active participation and co-operation from the parent company. The use of a separate entity as a designated investor in offset projects will not relieve the contractor of its obligation to meet its offset commitment.

## ***6) Shares in Ownership***

The EOC Guidelines call for equal ownership interests between: 1) the contractor group (i.e., the contractor awarded the project that is subject to the offset commitment, and other companies approved by the EOC to participate in the contractor's group); and 2) the Saudi Arabian group (i.e., approved Saudi investors). Based on the actual development of joint ventures set up after the Peace Shield I program, however, it appears that the EOC can and will consider different ownership percentages, if such are necessary for a particular project's success.

As in the case of the BITG, the contractor group can include privately owned Saudi companies. The guidelines specify, however, that these should represent no more than 10% of the contractor group's equity investment in any proposed project. The Saudi Arabian group, on the other hand, must be composed exclusively of Saudi companies approved by the EOC. These companies may be suggested either by the contractor or by the EOC. In certain cases, the EOC may limit participation in this group to Saudi joint stock companies only (EOS Publications, 1998).

## ***7) The Equity Retention Requirement***

According to the EOC Guidelines, a contractor cannot reduce its equity interest in any offset company until its offset commitment has been fulfilled. Other foreign investors, however, may be able to reduce their ownership positions, provided their shares are transferred only to the contractor or to another foreign investor, as opposed to transferring their shares to the Saudi Arabian group or to a Saudi entity within the contractor Group.

### ***8) The Calculation of Offset Credits***

The manner in which credits will be granted with respect to fulfilling a contractor's offset commitment is set forth in some detail in the EOC Guidelines. The guidelines specify that a contractor will receive full credit for the following, subject to the requirement that at least 20% of the offset obligation be satisfied through cash contributions to equity:

1. equity contributions by the contractor group into offset companies, whether such contributions are made in cash or in-kind;
2. that portion of each offset company's medium-term and long-term debt financing allocable to the contractor's group's shareholding therein; provided, that the maturity of debt approximates the 10-year term for fulfilling the offset commitment;
3. that portion of each offset company's retained earnings allocable to the contractor group's shareholding therein; and
4. the amount of the contractor group's investment in any approved expansion or diversification, or in any approved research and development project.

In addition, a contractor will receive credit of two times its share with respect to the costs of training Saudi nationals by the offset company. Under the guidelines, offset credits for the pre-operating costs of offset companies are limited to 5% of the offset company's initial capitalisation. Furthermore, credits will not be granted in cases where the contractor or another contractor has previously received offset credit. The guidelines do not provide for the timing associated with the granting of offset credits, but, in practice, this has always been addressed in the Commitment Agreement.

### **9) Time Limits**

Under the EOC Guidelines, the contractor must fulfil its entire offset commitment within 10 years from the effective date of its government contract. However, even prior to the signing of the government contract, it is required to: 1) submit proposals designed to meet at least 50% of its commitment at least 3 months prior to the anticipated signing of the government contract; 2) meet with the EOC to discuss its proposals at least 2 months prior to the anticipated signing; and 3) submit an Economic Offset Commitment Agreement setting forth the parties' respective obligations with respect to the program 3 months before the anticipated signing of the government contract.

The contractor drafts the initial Commitment Agreement, which typically sets out the kind of proposals the contractor intends to submit to the EOC to meet its offset commitment, and the contemplated time frame for enacting such proposals. The guidelines give the impression that the contractors' proposals are only one factor to be considered in evaluating the contractors' bids for the award of contracts. Historically, however, it appears that major Saudi defence procurement contracts have, in fact, been awarded based upon the perceived relative strengths and weaknesses of the competing contractors' offset proposals. Hence, the contractor's offset proposal is a fairly critical item in the contract negotiating process.

Under the guidelines, certain implementation milestones must also be met. These consist of the following:

1. within 3 months after the contract effective date, the contractor must either propose Saudi partners for inclusion in the Saudi Arabian group, or seek assistance from the EOC in identifying potential Saudi partners;

2. within 2 years after the contract effective date, the contractor must submit approval packages (containing specified detailed documents) for approved projects to meet at least half its commitment;
3. the contractor must have the approved projects in commercial operation within 2 years after the EOC approves the approval packages;
4. within 3 years after the contract effective date, the contractor must submit proposals to meet the remaining 50% of its commitment; and
5. within 4 years after the contract effective date, it must submit approval packages for those projects.

#### ***10) Failure to Meet Offset Obligations***

The EOC Guidelines do not provide for any penalty in cases where a contractor fails to meet the required milestones. This reflects a recognition that advanced projects in a developing country like Saudi Arabia are bound to encounter some difficulties and obstacles. However, in 1997, as a result of slow rates of compliance with offset commitments under the existing offset programs, the Saudi government issued a warning to the US, British, and French offset contractors to honour their offset commitments or risk their chances of being considered for future contracts. This matter, and the possibility that the Saudi government will begin to impose penalties against delinquent offset contractors, will receive further discussion in Section 2.6 which looks recent and emerging trends relating to the offset programs.

#### ***11) The Taxation of Offset Investments***

The EOC Guidelines are silent concerning the tax consequences of offset program investments. Hence, unless and until specific reliefs are granted, offset investments are

considered to be subject to the same Saudi taxes relevant to other similar investments or transactions in the Kingdom. (EOS Publications, 1996)

However, it should be observed that, under the guidelines, offset projects are eligible to benefit from all incentives currently given to investments in the Kingdom, as follows:

1. availment of long-term loan financing on concessional terms from the SIDF;
2. tariff exemption on imported equipment and materials;
3. selective tariff protection from imported products;
4. corporate income tax holidays for up to 10 years;
5. availability of low-cost utilities and fuels;
6. infrastructures including industrial estates; and
7. training subsidies for manpower.

## **2.5 The Achievements of the Economic Offset Program**

Without doubt, the development of the overall Economic Offset Program, and the implementation of the individual offset programs, has heralded a new phase of development for the Saudi economy. From the announcement of the Peace Shield Program in 1984 to the present time, the various offset programs have managed to register a series of important successes, offering significant investment opportunities to Saudi and foreign venture partners, and helping to promote a climate in which the Kingdom can genuinely hope to develop indigenous high-technology projects. From the various offset projects implemented, the Kingdom has reaped numerous benefits and advantages (Saudi Commerce & Economic Review, 1998). This section will present a brief overview of the achievements of the Economic Offset Program, looking particularly at the new technologies and new industries which it has introduced, the

affect it has had on Saudi Arabia's status as an importer and exporter of non-oil goods and services, the training and employment opportunities it has generated and the clear potential it has demonstrated for attracting future investment into the Kingdom.

### **2.5.1 New Technologies and New Industries**

As a result of the inclusion of top class, high-technology foreign companies in the individual offset programs, the most immediate impact of the various offset projects has been the inflow of technological know-how and expertise. The transfer of technology through the offset programs is the direct result of: joint projects; licensed manufacturing; the installation and operation of state-of-the-art equipment and process control software; and the training of technical and support personnel, particularly in the case of industrial ventures. Even in the case of the manufacturing-and-supply contracts awarded to AEC, for example, the customers supply the hardware and software elements of the industrial technologies required, as well as training Saudi personnel in their production and use (e.g., through project training and/or contractor training programs) (Riyadh Daily, 1996).

The inflow of technology into the Kingdom through the various offset projects has obviously coincided with the development of many new industries. A host of offset companies are now operating in diverse industrial (and service) fields such as the aviation industry, electronic engineering, computer and information technology, pharmaceuticals, sugar and precious metal refining, chemicals, automotive batteries, electrical goods, etc. The introduction of new products and services in the non-oil sector has added significantly to the momentum of the Kingdom's industrial and economic diversification drives. The successes of the various offset projects demonstrate the



effectiveness of using indirect offsets as a launching pad for developed countries to set up joint ventures in the non-oil sectors of the Saudi economy.

Another one of the major benefits produced by the Saudi Economic Offset Program lies in its significant contributions to the Kingdom's drive for economic and strategic self-sufficiency in crucial areas that require considerable aptitude in the sphere of high technology. The individual offset programs have given the Kingdom high-tech capabilities in vital areas both inside and outside the military sector, such as: defence systems; aircraft repair and modification; component and electronics manufacturing and repair; computer systems engineering technology; air traffic control; etc. At the Kingdom's present stage of economic development, it is difficult to imagine how these new technological capacities could have been developed without the offset programs.

In the defence and security sector, some examples of products now within the Kingdom's technological capability include: aircraft parts; tactical radios; tank electronics; avionics equipment for aircraft; laser guided bombs; complex low voltage power supplies (LVPS) for aircraft radar; cockpit control units; encryption devices; electronic warfare systems; chaff and flare countermeasures for military aircraft; Precision Lightweight GPS Receivers (PLGR); flight data recorder systems for jet fighters; etc. In the civilian sector, examples include: state-of-the-art telecommunications; aerospace service industries; electronic engineering; etc. (Saudi Commerce & Economic Review, 1998).

In all of these fields, the Kingdom has acquired a big technological lead over other countries in the region. More importantly, the emergence of the high-tech offset

companies has lessened the Kingdom's dependence on imported systems components and engineering support contractors, thereby sustaining regular operational readiness and reducing expenditures for maintaining high-use system components.

### **2.5.2 Import Substitution and Export Promotion**

The various offset projects have also made a significant contribution to the Kingdom's two-pronged drive for import substitution and export promotion. The growing list of locally available products and services provided by the offset companies obviously has had an impact on import demand. With respect to exports, the potential of products and services related to the offset programs (e.g., batteries, gold and silver ingots, sugar, catalysts, pharmaceuticals, etc.) is evident, especially with respect to the markets of the Gulf region. Examples of the sort of export-oriented contracts received by the AEC alone include:

1. avionics equipment for F-16 export sales under a licensed manufacturing contract with Lockheed Martin Tactical Aircraft Systems (LMTAS) of the US; Components of the F-16 manufactured at the company are being exported to Scandinavian countries and Taiwan, with LMTAS as the direct buyer of these components (MEED,1994);
2. the supply of ALE-47 RR-170 and RR-180 chaff and MJU-10 and M-206 flare countermeasures dispensers (electronic warfare expendable) used on F-5, F-15, F-16, C-130 and other aircraft and helicopters for regional customers under contract with Tracor Aerospace of the US (Arab News,1997);
3. the supply of upgraded ALQ-135 band 1.5 jammer components (i.e., complex power supplies) to the US Air Force (USAF) under contract with Northrop Grumman ESID of the US (CommsMEA,1997);

4. smart (coin and card operated intelligent) payphones for export to South America under contract with Elcotel of the US;
5. the supply of CDU-800 Control Display Unit hardware for use on US Navy aircraft under contract with the Col Avionics and Communication Division of Rockwell International of the US; and
6. work for the Kuwait Ministry of Communications.

### **2.5.3 Training and Employment Opportunities for Saudi Nationals**

The expanding industrial base that has resulted from the Economic Offset Program has translated into employment opportunities for Saudi nationals in the private sector. During a press conference, Prince Sultan bin Abulaziz disclosed that 15 high-tech firms set up under the Program have generated employment opportunities for over 2,000 Saudis. The Prince also announced an agreement reached with the American and British governments that 70% of the employees hired for the respective companies set up under their offset programs will be Saudi nationals (Arab News, 1997).

The high technology content of many of the offset ventures, particularly the Peace Shield I offset projects, has provided employment opportunities in high technology specialities (e.g., computers and IT, electronic engineering, aircraft maintenance and aerospace support industry specialities, etc.). The experience of AEC, in particular, in the hiring and development of Saudi technical and professional staff is noteworthy. Saudis constitute 63% of the company's workforce, consisting of technicians (43%), engineers (22.6%), professionals (21.7%), and administrative support personnel (12.8%). This performance has dispelled doubts that Saudis lack the technical skills for complicated fields like electronics (AEC Publications, 1998).

In addition, the training opportunities offered by the offset contractors themselves have benefited a substantial number of Saudi nationals. Of the approximately 5,000 person workforce employed by BAe in the Al Yamamah Program, for example, 1,400 are Saudis. In addition, BAe has already trained over 1,000 Saudi pilots for the RSAF, and through a school it set up in Riyadh, which is equipped with state of the art teaching and research facilities, workshops, and laboratories, it has been training Saudis in engineering trades associated with aircraft maintenance. Hence, BAe has contributed a great deal to the Saudisation drive, training Saudi nationals to take over skilled posts which had previously been held by Europeans and other expatriates (Al Yamamah Magazine, 1998).

All of these developments point to the Economic Offset Program's significant role in building up a new cadre of Saudi professionals and young Saudis trained in modern high-tech industries. Given what has already been achieved, the Program obviously has tremendous long-term potential in terms of the development of national manpower.

#### **2.5.4 Attracting Future Investment into Saudi Arabia**

In the initial stages of the individual offset programs, advanced contractors used to look at offset projects as liabilities rather than as promising prospects. Today, after the sustained successes achieved by the existing offset companies, foreign companies are beginning to find that offset projects can be good marketing, and they are becoming increasingly interested in developing and working with offset companies. In essence, the presence of the high-tech offset companies has enhanced the Kingdom's comparative advantage and strengthened its attractiveness as an investment destination.

Needless to say, the setting up of offset ventures opens opportunities for a great number of other prospective investment projects in the Kingdom. To cite a few of many possible examples:

1. the British Offset Office's cumene manufacturing project represents a downstream integration of the Kingdom's aromatics project;
2. AEC's plans to diversify its manufacturing operations demonstrate a wide range of investment possibilities based on electronic engineering; and
3. With Al Salam, AACC and MEPC all in operation, there should be numerous opportunities for the development of aircraft parts manufacturing.

## **2.6 Recent and Emerging Trends and Developments**

This section presents a brief discussion of recent and emerging trends and developments in the Kingdom that may exert a significant influence on the future of Saudi Arabia's Economic Offset Program. These include: the initiation of a number of new projects with offset potential; measures taken by the government to encourage compliance with offset obligations and to contribute to the further development and success of the existing offset projects; greater cooperation and collaboration within the offset community; and an increasing focus on Saudisation.

### **2.6.1 Recent Projects with Offset Potential**

In the recent past, a number of defence-related projects have been announced by the Saudi government. These include: the Saudi Arabian National Guard (SANG) Modernisation, the AWACS and KE-3 Aircraft Maintenance and Support Service Project, and the Patriot and Hawk Air Defence Systems. These projects either may

result, or have already resulted, in new offset obligations, or the creation of new business development opportunities for the existing Saudi industrial and contracting establishments (Arab News, 1998).

Within the context of its ongoing effort to modernise the Saudi Arabian National Guard (SANG), the Saudi government has asked the US for US\$1,075 million worth of light armored vehicles, weaponry and equipment. The proposed deal covers, in particular, 90-mm turret weapon systems, M240 machine guns, M2 .50-caliber machine guns, 90-mm ammunitions and associated spare parts, testing, maintenance facilities and full logistical and training support. The prime contractor for this project would be the Canada-based Diesel Division of General Motors (GM), with Cockerill Mechanical Industries of Belgium as the subcontractor (Arab News, 1998).

It was reported in 1997 that The Boeing Co., the Peace Shield I lead contractor, was to receive a major contract award from the Kingdom for the provision of maintenance and other support services for military aircraft (i.e., E-3 AWACS surveillance aircraft and KE-3 refuelling planes). It was expected that up to 500 Boeing employees would be stationed in the Kingdom for 3 years to carry out this contract (Electronic Defence, 1998).

Also in the middle of year of 1997, it was reported that Raytheon Corp. of the US, a major supplier of equipment and services to the Royal Saudi Air Defence Forces for the past 30 years, was awarded a US\$484 million contract to provide technical assistance, training and logistics support for the Kingdom's Patriot and Hawk air defence systems. The contract involves the provision of technical assistance at the Patriot and Hawk sites

and service depots throughout the country, training and instruction for the operation and maintenance of the equipment, and logistics support for modifications and spare parts. The project is to run up to December 1999 (Al Yamamah Magazine, 1998).

## 2.6.2 Government Measures to Encourage the Success of the Individual Offset Programs

From the beginning of the Economic Offset Program in 1984 up to the end of 1996, US, British and French defence contractors have incurred a total of US\$ 4.4 billion of offset obligations. Up to the end of 1996, these defence contractors had reportedly fulfilled only 10% of their obligations, a breakdown of which is presented in Table 2.3 (Saudi Commerce & Economic Review, 1998):

**Table 2.3: Saudi Economic Offset Program  
Offset Obligations and Rates of Compliance**

Nationality	Offset Obligation (US\$ Million)	Rate of Compliance
US	1,700	16%
British	2,000	8
French	700	6
Total	4,400	10%

This slow rate of compliance with offset obligations has been a cause of concern for the Saudi government, and it has taken the initiative with respect to encouraging the development of the individual offset programs. This push reflects growing concern about unemployment in the Kingdom. With one of the highest birth-rates in the world and a falling per capita income (i.e., US\$15,813 in 1981 to US\$7,590 in 1997) (ESCWA 1999), the Saudi government has naturally been focusing its attention on doing everything possible to generate and sustain long-term employment opportunities for Saudi nationals.

With the aim of spurring further investment and the successful development of the existing offset projects, the Saudi government has embarked on two parallel initiatives,

namely: 1) a “get tough” policy designed to force compliance with existing offset obligations; 2) a policy designed to help ensure the success of existing offset companies.

With respect to the “get tough” policy, as noted in Section 2.4.3, Prince Fahad bin Abdullah, chairman of the EOC, issued a warning in 1997 to offset contractors to fulfil their existing offset obligations or face difficulty in making future sales to the Kingdom. In addition, the Kingdom has also been assessing the imposition of penalties against foreign companies or governments that do not meet their offset requirements. While up to this time no decision has been reached to impose penalties, Saudi officials have reportedly noted that the offset programs of Kuwait and the UAE impose tough penalties for non-compliance (Defence News, 1997).

In addition to discussing linkage to future contracts and possible penalties to force compliance by offset contractors, the Saudi government is also working harder to ensure the success of the existing offset companies. This approach is premised on the notion that the best way to encourage offset investment is through success. The government has been directing more work to Saudi contractors, in some cases requiring that particular companies be included as subcontractors on large contracts. During a trip to the US in 1997, Prince Sultan bin Abdulaziz, Second Deputy Prime Minister and Minister of Defence and Aviation, successfully proposed that the Pentagon should award contracts to Saudi companies for some of the maintenance and support work for US aircraft stationed in the Kingdom, including F-15 and F-16 tactical aircraft, and Airborne Warning and Control System (AWACS) aircraft. The proposal was particularly attractive because, in addition to alleviating the high cost of sending aircraft to Europe or the US for minor repairs, it greatly benefited AEC, Al Salam Aircraft, and ISE, all of



whom obtained sizeable subcontracts for major government military and non-military projects (e.g., TEP-6, AWACS Peace Sentinel program, radar and avionics maintenance, etc.) (Arab News1998).

### **2.6.3 Greater Cooperation and Collaboration Within the Offset Community**

The ongoing government effort to help ensure success of offset companies has enhanced the atmosphere of cooperation and collaboration within the offset community. This is evident from: 1) the "cross-investments" between offset programs (e.g., BAe's investment in AACC, Rolls Royce's investment in MEPC, and Hughes Aircraft Co.'s investment in ISE); 2) the contract awards by one offset company to another, several examples of which have been discussed earlier; and 3) joint ventures/projects between offset contractors/companies (e.g., the ISE-Thompson CSF joint venture for the operation and management of the King Fahad International Airport air traffic control system, the planned joint venture between AT&T and ISE, the proposed cooperation between Sawari and Al Yamamah offset programs for a refractory plant project, etc.) (Arab News, 1998).

### **2.6.4 Increasing Focus on Saudisation**

In recent times, there has emerged within the offset community a new focus of efforts toward the training and development of Saudi manpower and the employment of Saudi nationals. As discussed in Sections 2.2.2, 2.3.2 and 2.5.3, BAe, in addition to its own extensive hiring and training of Saudi staff, has contributed much to Saudisation efforts, by developing a state-of-the-art training facility in Riyadh for engineers and aircraft maintenance technicians, and by entering into a joint venture with the local Kanoo Group to set up the SDTC, which conducts education and training courses in certain

specialised fields relevant to the private business sector. Both the Hughes Aircraft Co. and Thompson CSF are currently considering projects involving the education and training of Saudi manpower. On their own, the various offset companies have all been carrying out the continuing training and development of their own Saudi staff, within the broader context of the Kingdom's Saudisation efforts (Riyadh Daily, 1996).

## **2.7 Conclusion**

The purpose of this chapter was to present information to help the reader develop a better understanding of the overall Economic Offset Program, the individual offset programs developed within the context of the Program, and the resulting offset companies, that form the setting for the research on job satisfaction which is presented in the balance of this study. The chapter examined the following important issues: 1) the development and implementation of the existing individual offset programs; 2) the administration of the Economic Offset Program and the government's development objectives for future individual offset programs; 3) the achievements of the Economic Offset Program to date, and its significance in relation to the Kingdom's economic future and 4) recent and emerging trends that might affect the future prospects of the Economic Offset Program.

Section 2.2 presented descriptions of, and information on, the individual offset programs that have been developed to date within the context of the overall Program. The Kingdom has had seven different programs, involving contractors from the US, the UK, and France. The first was the Peace Shield I Offset Program established in 1984 as part of the US contract for the Peace Shield Command and Control Program. The second was the Al Yamamah Offset Program, the British offset program developed out

of the project called “Al Yamamah,” initiated in September 1985, under which the Royal Saudi Air Force (RSAF) would acquire Tornado, Hawk and PC-9 aircraft together with associated weapons, equipment and support. The third was the Peace Shield II Offset Program established in July 1991 when Hughes Aircraft Co. of the US won the contract for the second phase of the Peace Shield Program, taking over from the Boeing Co. The fourth was the General Dynamics Economic Balance Program, which was associated with Saudi Arabia’s purchase, in 1992, of M1A2 Abrams Main Battle Tanks. The fifth was the McDonnell Douglas Offset Program, which was associated with that company’s contract to supply F-15 fighter aircraft to the Kingdom. The sixth was the Sawari Offset Program, developed with France in 1990 and applied to a subsequent contract for the supply of two Lafayette class frigates to the Saudi navy. The seventh was the AT&T Offset Program, the first non-military offset project in Saudi Arabia, associated with a contract awarded by the Ministry of PTT to AT&T of the US. in 1994 for the expansion project (TEP-6) and (GSM) system.

Section 2.3 supplied information about the economic offset projects, including the first five offset companies: Advanced Electronics Company, Al Salam Aircraft Co. International Systems Engineering, Aircraft Accessories and Components Co, and Middle East Propulsion Co. The section proceeded to provide details about the Al Yamamah Offset Projects: Glaxo Saudi Arabia, United Sugar Company, Saudi Development & Training Co, Cyclar Project, Dhahran Harco Chemical Industries Ltd, Rezayat Flover CO Ltd, and Cumene Manufacturing Facility Project. The Peace Shield II Offset Projects, particularly the Middle East Battery Co. were also detailed, as were the Sawari Offset Projects including: Dahab Co Ltd, AL Bilad Catalyst CO Ltd, and Arabian Meter Co

Section 2.4 examined the administration of the Saudi Economic Offset Program, identifying, and providing information about, the organisational units developed by the government to oversee the Program. These are: the Ministerial Committee, the Executive Economic Offset Committee (EOC), the Economic Offset Secretariat (EOS), and Saudi-UK Joint Offset Team. The section also considered the guidelines established by the EOC for the development of future individual offset programs.

Section 2.5 assessed the achievements of the Economic Offset Program to date, paying particular attention to: the new technologies and new industries which it has introduced; the affect it has had on Saudi Arabia's status as an importer and exporter of non-oil goods and services; the training and employment opportunities it has generated; and the clear potential it has demonstrated for attracting future investment into the Kingdom.

Finally, Section 2.6 presented information on recent and emerging trends and developments that may affect the future progress of the Economic Offset Program. These included: some prospective contracts likely to involve offset obligations; the government's efforts to further enhance offset investment and development; increasing cooperation and collaboration within the offset community; and, an increased emphasis on the training and development of Saudi manpower.

## **Chapter Three:**

### **A Review of Literature on Job Satisfaction**

#### **3.1 Introduction**

Job satisfaction is considered by many to be one of the most important topics in the study of management and industry. According to Lawler (1973) it is “a key measure of the quality of life in organisations.” As the level of satisfaction workers derive from their jobs impinges both directly and indirectly on their psychological needs, and as all organisations require people in order to function, it is vital for any organisation to maintain a reasonable level of job satisfaction among its employees. It is generally assumed that high levels of employee satisfaction are linked to high productivity, while lower levels correspond to decreased productivity and other significant problems such as absenteeism and staff turnover.

Because of its importance, the topic of job satisfaction has been one of the most widely studied of all subjects relating to organisational behaviour. A very great number of articles, books and dissertations have been published over the past six decades on a variety of subjects related to different aspects of job satisfaction, ranging from theories concerning what it is and how it can be created and maintained to empirical studies designed to measure the levels of satisfaction in specific organisations.

As noted in Chapter One, the overall aim of this study is to address the previously neglected issue of job dissatisfaction in the Saudi offset companies in two ways: 1) the study will consider the underlying causes, and the practical consequences, of job satisfaction and job dissatisfaction in light of the considerable body of theoretical and empirical literature that has been produced to address the subject in settings outside the

Saudi economic offset companies; and 2) the study will present the results of an empirical research project, designed with reference to the existing literature, and carried out by the researcher in three of the more developed Saudi offset companies.

The purpose of this chapter is to establish the theoretical context called for by the first component of this methodology. Its aim is not to present a comprehensive review of all of the literature on job satisfaction, but rather, to contribute to the reader's understanding of the nature, underlying causes and consequences of job satisfaction by presenting a review of: 1) some of the more influential theories of job satisfaction; and 2) significant empirical studies conducted by other researchers to determine the most significant job satisfaction factors in different work settings.

The chapter is organised as follows: In Section 3.2 the researcher will examine the existing definitions of job satisfaction presented by different theorists. With respect to this, the section presents a brief survey of some of the more significant definitional issues and examines the importance of distinguishing job satisfaction from related concepts such as motivation and morale. In Section 3.3 some of the more influential and significant theories of job satisfaction will be presented in some detail. In Section 3.4, the researcher will draw together a significant number of theories and empirical studies to explore the factors associated with high and low levels of job satisfaction. Section 3.5 will consider the conclusions of many theorists and researchers concerning the potential consequences of low and high job satisfaction levels. Finally, Section 3.6 will present a summary of the literature review and will conclude the chapter.

## **3.2 Definitions of Job Satisfaction**

There is no real consensus concerning a precise definition of job satisfaction. However, most of the many definitions that have been proposed by various theorists and researchers are reasonably similar to each other in certain respects. Although experience, research findings and individual preferences may lead different scholars to disagree about specific points of definition (such as the emphasis which needs to be placed on the distinction between job satisfaction and job dissatisfaction, the conceptualisation of what actually constitutes the “achievement of one’s job values”, etc.) there does seem to be a nearly universal understanding that the term job satisfaction refers to a state of affairs in which an employee has a positive emotional feeling towards his job (Bussing, 1997).

In this section of the chapter, a review of the distinct definitions of job satisfaction proposed by a number of prominent researchers and theorists will be presented. The general aim of the review is to build a more complete understanding of what the concept of job satisfaction entails by examining some of the more significant definitional fault-lines and points of contact. The section is divided into three sub-sections. Section 3.2.1 presents a review of some of the more prominent and influential specific definitions of job satisfaction that have been proposed by scholars working in the field, and considers the significance of some of the points and issues where these definitions are not in agreement. Section 3.2.2 looks in some detail at one of the more important definitional issues, the nature of the distinction between job satisfaction and closely related concepts such as motivation and morale. Finally, section 3.2.3 presents a summary of the significant points raised throughout the whole section, and concludes the review of definitions.

### **3.2.1 Specific Definitions of Job Satisfaction and Some Key Definitional Issues**

A number of scholars have presented relatively simple, but popular and influential definitions of job satisfaction. For example, Vroom (1964) proposed a basic or simple definition, using the terms 'job satisfaction' and 'job attitude' to refer to the: "effective orientation on the part of the individual towards work roles they are presently occupying". Locke (1976) defined job satisfaction as: "a pleasurable or positive emotional state resulting from the appraisal of one's job experience" and went on to say that: "group morale is the sum of the individuals' satisfaction". Schultz (1978) defined job satisfaction in terms of a: "psychological disposition of people towards their jobs, which involves a collection of numerous attitudes or feelings". And Muchinsky (1997) defined job satisfaction as the degree of pleasure that a person has towards his job.

These simple definitions are useful for defining the basic parameters of a discussion about job satisfaction, but they are not particularly rigorous, and they do not go very far in terms of explaining what the construction of job satisfaction actually entails. Consequently, some scholars have attempted to produce more developed definitions for their studies.

Blum and Naylor (1968) perceived job satisfaction as a general attitude, which reflects specific job factors, individual characteristics, and group relationships. This definition is still fairly simple, but is more sophisticated in the sense that it makes specific reference to sources of job satisfaction. Many other theorists have followed Blum and Naylor's lead, building on simple definitions by incorporating: one or more specific job factors;



an awareness of the potential impact of the personal characteristics, preferences and circumstances of workers; observations about group dynamics; etc.

Some definitions move away from the traditional strong emphasis on worker attitudes by identifying worker/employer congruence as a crucial indicator of job satisfaction. For example, Mumford (1970) suggested that the degree of fit between a worker's needs and the employing organisation's demands could determine job satisfaction. In other words, if a person's needs are met and his performance fits his employers demands there will be a feeling of job satisfaction. The definition of Salancik and Pfeffer (1977) has a similar orientation. They saw job satisfaction as a term, which describes the state of correspondence between the job situation or job characteristics and a person's needs. Thus, if an individual is satisfied with his job, his job characteristics presumably fit his needs. The observation that job satisfaction involves not just worker attitudes but a dynamic between organisational attitudes and goals and worker attitudes and goals adds a useful level of definitional and theoretical complexity that is either absent, or not clearly presented, in many other conceptualisations of job satisfaction.

In addition to the issues concerning definitional specificity and focus on employee attitudes as opposed to employer/employee dynamics, a dispute has arisen between some theorists concerning whether or not a distinction needs to be made between job satisfaction and job dissatisfaction, and if so, what the nature of the distinction should be.

For many theorists, job satisfaction is an inclusive term which can be applied to the whole range of worker attitudes (Muchinsky 1997). These theorists would typically

speak of a high level of job satisfaction, or a low level of job satisfaction, instead of necessarily identifying a positive attitude as job satisfaction and a negative attitude as job dissatisfaction. These scholars might sometimes employ the term job dissatisfaction. However, in such cases, they are not attempting to describe a state that is qualitatively distinct from job satisfaction. Rather, they simply mean that there is a low level of job satisfaction.

Other theorists stress the distinction between the two terms. Armstrong (1988) noted that positive and favourable attitudes towards the job indicate job satisfaction, while negative and unfavourable attitudes towards the job indicate job dissatisfaction. Herzberg (1966) also identified a distinction between satisfaction and dissatisfaction, but argued that job satisfaction and dissatisfaction are not opposites of each other. He postulated that: “the opposite of job satisfaction is not job dissatisfaction but, rather no job satisfaction.” Similarly, the “opposite of job dissatisfaction is not job satisfaction but, no job dissatisfaction”, which in fact means a feeling of “indifference”. Herzberg’s research led him to conclude that completely distinct sets of factors produced job satisfaction, on the one hand, and job dissatisfaction, on the other. Consequently, he felt that the two states were not particularly closely related to one another, and needed to be clearly differentiated.

With respect to the various definitional issues, the researcher feels that it is probably appropriate to conceptualise job satisfaction in fairly general terms as the attitude that a worker has about his job. Certainly, this attitude must be viewed as being strongly related to causal factors including personal factors, factors relating to the nature of the work itself, and factors relating to other aspects of the job context. It is difficult to

incorporate specific factors into one's definition because individual workers' circumstances, needs and values vary. The researcher agrees with the theorists who have observed that job satisfaction is strongly related to the presence or absence of a good fit between the worker's goals and attitudes and the goals and attitudes of the employing organisation. With respect to the distinction between job satisfaction and job dissatisfaction, the researcher does not feel that a clear separation needs to be established. Throughout the course of this study, he will employ the term job satisfaction to describe a range of attitudes that includes both positive attitudes towards work, or high levels of satisfaction, and negative attitudes towards work, or low levels of satisfaction. When the researcher uses the term job dissatisfaction, he means simply a low level of job satisfaction, not a state which is the opposite of job satisfaction.

### **3.2.2 Job Satisfaction, Motivation and Morale**

One of the more significant definitional issues is the nature of the distinction between job satisfaction and closely related concepts such as motivation and morale. While some theorists effectively view the different concepts as being more or less synonymous, others have stressed that there are important differences between job satisfaction and motivation, on the one hand, and job satisfaction and morale, on the other hand.

#### ***1) Job Satisfaction and Motivation***

The term "motivation" was originally derived from the Latin word *movere*, which means "to move." Gould and Kolb's Dictionary of the Social Sciences (1964) defines the word as follows: "motivation refers to any organismic state that mobilizes activity which is in some sense selective, or directive, with respect to the environment". More generally, motivation refers to: 1) an individual's willingness to expend effort to

achieve goals; and 2) the underlying needs and priorities which give rise to that willingness.

Different social scientists have developed their own definitions for motivation. Vroom (1964) defined it as a process governing choices made by persons or lower organisms among alternative forms of voluntary activity. Atkinson (1964) defined it as the contemporary (immediate) influence on the direction, vigour, and persistence of action. Jones (1955) observed that motivation is: “how behaviour gets started, is energised, is sustained, is directed, is stopped, and what kind of subjective reaction is present in the organism while all this is going on”. Campbell & Pritchard (1976) gave a slightly different definition in stating: “motivation has to do with a set of independent/dependent variable relationships that explain the direction, amplitude and persistence of individual behaviour, holding constant the effects of aptitude, skill and understanding of the task, and the constraints operating in the environment”. Batten (1976) stated that: “motivation literally means actions to achieve motive”. According to Hallriegel and Slocum (1976): “motivation has been defined as a predisposition to act in a specific-goal directed manner”. Mitchell (1982) defined motivation as: “the degree to which an individual wants, and chooses, to engage in certain specified behaviour”. And finally, Steers and Porter (1991) identified three major components of motivation: first; what energises human behaviour; second, what directs or channels such behaviour; and third, how this behaviour is maintained or sustained. They define work motivation as: “conditions which influence the arousal, direction, limitation and maintenance of behaviour relevant in work settings”.

Many researchers have given considerable attention to the subject of motivation in an attempt to clarify and explain how job satisfaction is constructed. Indeed, some of the most significant theories of job satisfaction, including Maslow's Needs Hierarchy Theory and Vroom's Expectancy Theory (both of which will be treated in some detail in Section 2.3) lay primary stress on the idea that understanding and accounting for worker motivation is the key to achieving high levels of job satisfaction. Thus, for some theorists, a high level of worker motivation can be equated with job satisfaction, and a low level of motivation with dissatisfaction.

However, a number of scholars have stressed that, although there does seem to be a clear correlation between motivation and job satisfaction, there are important differences between the two concepts. For example, Dubrin (1972) argued that the two concepts are distinct. He viewed motivation as the expenditure of effort towards accomplishing a goal, and observed job satisfaction as entailing a positive feeling towards work. From this perspective, motivation translates directly into behaviour, while job satisfaction merely reflects an attitude about behaviour. A motivated worker may or may not experience satisfaction, and a satisfied worker may or may not be highly motivated. He gave a clear example of a district sales manager who worked to a minimum level to meet his job requirements because of lack of motivation to expend more effort, while, at the same time, he experienced a high level of satisfaction because he appreciated the opportunity to further his career.

Similarly, McCormick and Ilgen (1985) argued that, although job satisfaction and work motivation are related to each other to a high degree and are sometimes treated jointly in the literature, the two topics should be considered as distinct subjects. They essentially

restated Dubrin's distinction, noting that, while job satisfaction is related to one's feelings towards one's job, work motivation is concerned with the employee's behaviour in the work place. Nevertheless, they went on to acknowledge that, to at least some extent, most theories of motivation can also be viewed as contributing to theory of job satisfaction.

Schultz (1978) suggested that, the concepts of motivation and job satisfaction are distinct, but closely interrelated. Satisfaction can result from the fulfilment of motivations, and new sources of satisfaction can generate other motivations.

Mullins (1990) suggested that, motivation to work well is usually related to job satisfaction, but observed that the precise nature of the relationship is not clear. One view is that the motivation required for a person to achieve a high level of performance represents, or effectively is, satisfaction with the job. A worker who can fulfil his motivations through his job will expend the appropriate effort and be satisfied, while a worker who cannot fulfil his motivations will expend less effort and be dissatisfied. Another view is that motivation has to do with needs and values that directly govern behaviour while job satisfaction is more of an attitude, an internal state, which may or may not have a great effect on behaviour. A high level of job satisfaction might increase a worker's motivation, but a high level of motivation does not necessarily mean that a worker will be satisfied.

This researcher agrees with those scholars who hold that motivation and job satisfaction are distinct but closely related concepts. A great deal of confusion seems to stem from the fact that the term motivation has two fairly distinct applications. That is to say,

motivation can be viewed as an attitude, or a state of being, which reflects a willingness to work, and it can also be viewed as a need or a value, something that gives rise to such an attitude. Thus, to say that a worker is highly motivated can mean: 1) that he is greatly willing to expend effort; or 2) that, irrespective of his willingness to expend effort, he has considerable motivation in the sense of having urgent needs or desires to fulfil.

The relationship between job satisfaction and motivation, in the sense of willingness to work can be variable. A worker may expend great effort and not achieve satisfaction, in which case, his willingness to expend effort may decline. Conversely, a worker may start with a low level of motivation, in the sense of being willing to work, but may become more motivated, in this sense, if he derives satisfaction from his job. Some workers might continue to expend great effort over long periods, even if they are not satisfied, while others might continue to expend minimal effort, even if they take satisfaction from their jobs. The different reactions of individual workers in such situations can probably be best understood with reference to their underlying motivations, in terms of needs and values, rather than the level of motivation which has to do with their willingness to work.

The relationship between job satisfaction and motivation, in the sense of needs or values, seems more straightforward. A worker will presumably derive satisfaction from his job if it gives him sufficient opportunity to fulfil his motivations. This is why theory of motivation is so important in the context of theory of job satisfaction. In order of achieve a high level of job satisfaction, an organisation or employer must first understand the workers' individual motivations, in the sense of their needs and values, and then take appropriate steps to give the workers opportunities to satisfy these

motivations. Viewing the terms motivation and job satisfaction in this way, it seems clear that the two are not the same thing. However, an understanding of one of the concepts, that of worker motivation, is a vital prerequisite for understanding how to facilitate the state that is embodied in the second concept, job satisfaction.

## ***2) Job Satisfaction and Morale***

In everyday speech, most people seem to use the terms job satisfaction and morale interchangeably. Some researchers seem to adopt this convention, but others have argued that job satisfaction and morale should be viewed as distinct concepts.

Formal definitions of morale vary widely. Viteles (1953) defined morale as “an attitude of satisfaction with, desire to continue in, and willingness to strive for the goals of a particular group or organisation”. Guion (1958) researched the definition from many different sources and ended up with several definitions which could be summarised as “the absence of conflict; a feeling of happiness; a group cohesiveness; good personal adjustment; ego involvement in one’s job; a collection of job related attitudes; and finally, as an individual’s acceptance of the goals of groups”. Guion expressed his own preferred definition of morale as: “the extent to which the individual’s needs are satisfied and the extent to which the individual perceives that satisfaction as stemming from his total work situation”. Gilmer (1961) said that morale is “a feeling of being accepted by and belonging to a group of employees through adherence to common goals”. Blum and Naylor (1968), maintain that the term satisfaction is an individual phenomenon, while morale is a by-product of personal experiences in a group setting. Edwin Locke (1976) concluded that there are two differences between morale and job satisfaction: first, morale is more future orientated, while satisfaction is more present



and past orientated; and second, morale often has a group referent while satisfaction refers to the attitude of a single individual towards his job situation. Kossen (1978), said that morale is a term, which can be used in referring either to group or individual attitudes towards the organisations they work for, in general, or towards specific facets of work. Gruneberg (1979) distinguished between 'job satisfaction' as an individual's emotional reaction towards work and 'morale' which means a group feeling towards work. Halloran (1986) defined morale as a state of mind and emotion, a composite of the feelings of individuals and groups towards life, environment and work

Clearly, one potential point of distinction between the concepts of job satisfaction and morale has to do with their application to individuals or groups. It will be observed that, of the above definitions, some, such as Guion's preferred definition, make no clear distinction between morale and job satisfaction on this basis, referring only to individual attitudes. Others, such as Blum and Naylor, Locke and Gruneberg, state clearly that morale applies to group attitudes while job satisfaction applies to individual attitudes. Others, such as Kossen maintain that the term morale can apply either to group attitudes or individual attitudes, which presumably means that it could be synonymous with job satisfaction, at least in the case of individual attitudes. Still others, such as Halloran, suggest that morale is a composite of individual and group attitudes.

Another potential point of distinction between the two concepts is presented by Locke's definition. Locke suggested that morale is future orientated, and is therefore concerned with workers' expectations, and that job satisfaction has a more past and present orientation, and therefore relates to existing conditions and past experiences.

This researcher feels that the distinction some scholars have suggested with respect to using the term morale to describe mainly group attitudes and the term job satisfaction to describe individual attitudes is a valid and useful one. Certainly, some distinction needs to be made between group and individual attitudes, as individual workers within relatively satisfied work groups might be experiencing low levels of satisfaction, or, conversely, dissatisfied groups may include individual employees who are satisfied with their work. Morale is as good a term to use as any in order to clarify that one is referring to a group attitude rather than an individual attitude.

However, with respect to Locke's point about using the different terms to distinguish future orientated attitudes from past and present orientated ones, this researcher feels that, although the distinction itself is valid, the use of the this particular terminology to identify it is problematic. It is certainly true that workers' expectations as well as their past and present experiences factor into their attitudes. It is also true that, in some situations, workers will derive temporary satisfaction from the expectation of future achievement. Consequently, future orientated attitudes must be accounted for in theories of motivation and job satisfaction, just as past and present orientated attitudes must be accounted for. However, the use of one term, morale, to make both of the distinctions seems unsatisfactory. The observation that future orientated attitudes are important would seem to apply just as much for individual workers as for groups. So, if one were already using the term morale to refer to group attitudes, one would need to expand one's terminology to distinguish between individual expectant attitudes and group ones. Furthermore, it seems fairly clear that groups, like individuals, might have attitudes that are past and present orientated as opposed to future orientated. So, if the term morale

were only to be applied to expectant attitudes, a new term would need to be developed to refer to groups' past and present orientated ones, and so on.

### **3.2.3 Definitions of Job Satisfaction: Summary and Conclusion**

There is no real consensus concerning a precise definition of job satisfaction. However, there does seem to be a nearly universal understanding that the term job satisfaction refers to a state of affairs in which an employee has a positive emotional feeling towards his job. Beyond this, individual theorists differ on a number of points.

Some scholars' definitions are more complex and explicit than others, and make reference to: specific job related factors; an awareness of the potential impact of the personal characteristics, preferences and circumstances of workers; observations about group dynamics; etc. Individual theorists also differ in terms of their conceptualisations of what constitutes the "achievement of job values" (Bussing, 1997). Some definitions place a strong emphasis on worker attitudes, while others comment on the importance of a good fit between employer goals and attitudes and worker goals and attitudes. Additionally, theorists have different opinions concerning whether or not a distinction needs to be made between the concepts of job satisfaction and job dissatisfaction, and, if one is needed, what it should be. Many theorists think of job satisfaction as something which is always more or less present, and consequently refer to there being a low or high level of job satisfaction. For these theorists, job dissatisfaction simply means a low level of job satisfaction. Other theorists hold that the two concepts need to be distinguished from one another. Some regard the two concepts as being opposites, with job satisfaction reflecting positive and favourable attitudes towards one's job situation and job dissatisfaction reflecting negative and unfavourable attitudes. Other scholars,

most notably Herzberg, trace satisfaction and dissatisfaction to different root factors, and consequently argue that the two concepts refer to distinct states and cannot be described as being simply opposites of one another.

With respect to these issues, the researcher prefers to define job satisfaction in fairly general terms as the attitude that a worker has about his job. He would agree that this attitude is strongly linked to causal factors but would argue that it is difficult to incorporate specific factors into one's definition because individual workers' circumstances, needs and values vary. The researcher agrees with the theorists who have observed that job satisfaction is strongly related to the presence or absence of a good fit between the worker's goals and attitudes and the goals and attitudes of the employing organisation. The researcher does not feel that a clear terminological distinction needs to be made between job satisfaction and job dissatisfaction. He views the term job satisfaction as describing a range of attitudes that includes both positive attitudes and negative attitudes towards work. Consequently, when the researcher uses the term job dissatisfaction in the context of this study, he means simply a low level of job satisfaction, not a state which is the opposite of job satisfaction.

In addition to these definitional issues, it should be noted that the term job satisfaction has often been strongly linked with other terms such as motivation and morale, to the extent that it is sometimes difficult to separate the concepts from each other. With respect to distinguishing motivation from job satisfaction, there seems to be an increasing consensus that the two should be viewed as closely related but distinct concepts. The researcher would argue that motivation, when defined in terms of the needs and values which cause individual workers to do their jobs, is a crucial concept

for understanding workers' behaviour and attitudes. Job satisfaction, by contrast, is the concept which describes the attitude that workers have based on their ability to fulfil their motivations through their jobs. Since an understanding of the former is a necessary key to understanding and promoting the latter, it is natural that theory of motivation and theory of job satisfaction are closely related topics. With respect to the distinction between job satisfaction and morale, there is no clear consensus, but the researcher will adopt the useful conceptualisation employed by many theorists that morale is a term which should be applied to group attitudes, while the term job satisfaction should be used to describe the attitudes of individual workers.

### **3.3 Theories of Job Satisfaction**

Job satisfaction has been the concern of organisational behaviour sociologists as well as industrial psychologists for a long time. A great deal of effort has been made by researchers in an attempt to understand job satisfaction and to explain how satisfactory levels can be achieved. This effort stems from the belief that job satisfaction among employees in any given organisation is just as important as other factors which have long been recognised as essential such as adequate financial resources, use of modern technology, and competent administrative policy. The human resource is no longer ignored since employers and organisations have come to perceive how important it is to satisfy the employee's needs.

Mullins (1996) stated that work motivation theories might be divided into two general categories: content theories (e.g. Maslow's Needs Hierarchy Theory) and process theories (e.g. Vroom's Expectancy Theory). Content theories attempt to explain those specific things which actually motivate the individual at work and are concerned with

identifying the individual employee's needs and the goals the employee pursues in order to satisfy these needs. Process theories, by contrast, attempt to identify the relationship among the dynamic variables that make up motivation. While content theories concentrate on the basic needs and goals that underlie motivation, process theories are concerned with the actual motivation process, that is, not only why but also how behaviour is initiated, directed and sustained (Mullins, 1996).

A considerable number of studies have been done and a great number of theories have been advanced to explain how high levels of job satisfaction can be encouraged. Obviously, a comprehensive analytical review of these theories is beyond the scope of this chapter. In this section, the most frequently cited and influential theories of job satisfaction will be reviewed in some detail and a brief overview of some other theories will be presented. The section is divided into five sub-sections. In sections 3.3.1 and 3.3.2, particular attention will be given to Maslow's Needs Hierarchy Theory and Herzberg's Two-Factor Theory, respectively, because these two theories are widely considered to be the fundamental theories in this field, and the majority of researchers refer to them in their arguments and discussions. In section 3.3.3, a number of other significant theories will be reviewed, including Vroom's Expectancy Theory, Adams' Equity Theory, Lawler's Comparison Model and Locke's Value Theory. In section 3.3.4, a brief review of some other theories of job satisfaction will be presented with the aim of establishing a better general picture of the kinds of factors that different researchers have found to be significant. Finally, section 3.3.5 will present a summary of the major points raised by the different theories.

### **3.3.1 Maslow's Needs Hierarchy Theory**

One of the most influential basic theories of work motivation is the Needs Hierarchy Theory proposed by Abraham Maslow in 1970. According to Maslow, all human needs can be classified as relating to a hierarchy of five basic categories of needs, namely: physiological; safety; social; esteem; and self-actualisation. The needs associated with these categories spring from the depth of human life. They can be considered as essential objectives that are inherent to all human beings, although Maslow acknowledged that there are certain differences among people in terms of the quality and/or quantity that is perceived as fulfilling these needs. A job is one potential source of fulfilment for all of the different categories of needs. According to Maslow, to make workers more motivated these needs categories should be considered. The basic premise is that, the more workers are able to fulfil their needs in the work place, the greater their job satisfaction will be.

Maslow suggested that the five basic human needs categories play a vital role in obtaining social and psychological equilibrium. All five categories are related to each other in a hierarchical fashion, and once an individual fulfils his needs in the first category he will be preoccupied by the next need category until it too is satisfied. Thus, a person who feels that something is lacking in one of the five needs categories, can be motivated until he reaches the level of satisfaction in this particular area. The next unsatisfied need area in the hierarchy will then dominate his behaviour and can be used as a motivator. According to Maslow, people will never fulfil all of these needs completely, so specific needs will still dominate their behaviour. If a person is incapable of meeting and satisfying any of these needs, it will bring about frustration and will prevent the next need from emerging.



Maslow gave priority at the bottom of his pyramidal hierarchy to physiological needs. Physiological needs comprise the basic biological needs for any organism, such as the need to eat, to drink or to sleep. For a worker, a job is perceived, in the first instance, as a way of satisfying this most basic category of needs. An employee will be satisfied to the extent that he can earn money to buy food, obtain adequate shelter, etc.

The second category in Maslow's hierarchy is safety needs. After the physiological needs have been fulfilled, a human being, as an organism, will be seriously looking to satisfy safety needs. This category embraces being secured from any sort of threat that may be caused by any kind of physical or emotional instability or hazard. Namer (1990) argued that workplace fulfilment of this needs category might be supplied in a number of ways: the employer could work to build a strong relationship of respect between all the members in an organisation; the employer could ensure that the workers are given a sufficient and democratic chance to voice their grievances; the employer could provide a developed framework aimed at protecting the workers and removing any potential danger that may affect them; and so on.

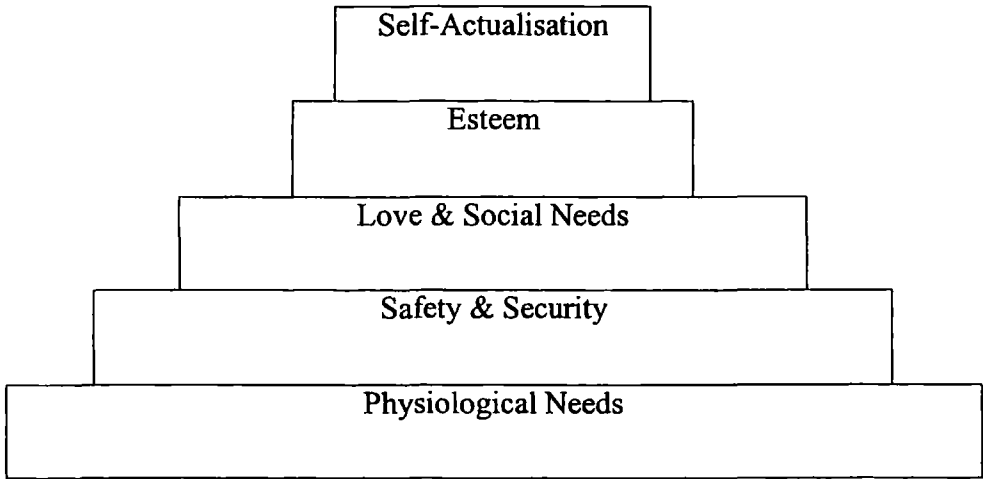
The third category, social needs, will emerge when a person has satisfied the lower needs, namely physiological and safety needs. In this category Maslow meant the need for belonging and for love. Namer (1990) suggested that jobs which cannot provide employees with a sense of belonging and cannot strengthen the relationships between employees are likely to pose serious managerial problems such as absenteeism, high staff turnover and a decline in productivity.



The fourth category in Maslow’s hierarchy is the need for esteem. This includes both the individual’s feeling of self-confidence, and the validation of this feeling in the form of outside recognition. Franken (1982) argued that a job can provide sufficient rewards (such as prestige, status, appreciation, etc.) to satisfy many of a worker’s esteem needs.

The final and, according to Maslow, the highest, of the need categories is self-actualisation. Here the individual is concerned primarily with developing his or her full potential as an individual and with attaining all that is possible. This is the need for a person to do what he actually wants to do, or to be what he wants to be. Once a person fulfils the need for esteem, he will try automatically to satisfy the need for self-actualisation, and he will be dominated by this need either until it is satisfied or until another lower level need emerges to attract his attention.

**Figure 3.1: Maslow’s Hierarchy of Needs**



Since Maslow first published his theory, it has become one of the most popular and influential theories of motivation in the management and organisational behaviour literature. Lawler (1973) and Namer (1990), along with many other writers in this field, have observed that Maslow’s Needs Hierarchy Theory is one of the most popular theories in the study of motivation. Franken (1982) describes this theory as the best

known and most widely accepted of the need-fulfilment theories that have helped to guide researchers' and managers' thinking on the subject of job satisfaction.

On the other hand, Maslow's theory has been criticised by many researchers. For example, Franken (1982) noted that Maslow's theory is difficult to test. Indeed, Maslow did not even attempt to provide any guidelines on how to test the theory. Muchinsky (1997) described the theory as "based on logical and clinical insights into human nature rather than on research findings". Wahba and Bridwell (1973) thought that the theory contains ambiguities regarding how certain variables such as age and sex might influence the fulfilment of some needs. They asked if there is any difference between different individuals' respective compulsions to fulfil these needs. Other researchers have noted that the point when a person seeks to fulfil each of these needs has not been clearly defined (Muchinsky, 1997). A number of scholars have argued that there is no clear evidence that human needs can be classified into five structured hierarchical categories. For example, Locke (1976) not only argued that Maslow did not offer any substantial proof that the five categories are real needs, but also asserted that Maslow contradicted himself with respect to describing the relationship between needs and behaviour. On the one hand, Maslow argued that satisfaction of a particular need will be achieved by fulfilling it, and that, consequently, it will not determine subsequent behaviour. On the other hand, he asserted elsewhere that behaviour can be determined by several, or even all, of the five categories simultaneously.

The researcher agrees with the many scholars who consider Maslow's theory to be one of the most important theories of motivation in the management and organisational behaviour literature. Despite its shortcomings, it was one of the first theories to present

a scheme of classification and an order of priorities for looking at basic human needs as they relate to motivation and behaviour. Although it has justly been criticised as being confusing or underdeveloped in some areas, difficult to test, and ambiguous in terms of failing to account for the differences between individual human beings, it remains one of the best known and widely accepted motivational theories. It has certainly made a significant contribution to the current understanding of worker motivation and job satisfaction.

### **3.3.2 Herzberg's Two-Factor Theory**

In "The Motivation to Work," originally published in 1959, Herzberg (Herzberg, Mausner, and Snyderman, 1993) presented another fundamental theory of work motivation called the Two-Factor or Motivation-Hygiene theory. In the course of developing the theory, Herzberg and his associates conducted empirical research concerning job attitudes among two hundred engineers and accountants, asking each of them to describe the times when they felt good or bad about their jobs. After categorising the responses and analysing them, Herzberg isolated two sets of factors as determining job satisfaction and dissatisfaction.

According to Herzberg, there is a set of factors that do not produce job satisfaction, but that can produce job dissatisfaction. He called these "Hygiene Factors" and observed that they are "extrinsic factors", that is, factors that are not related directly to the job itself, but rather, to the environment or the context of the job. These factors include: company policy and administration practice; work conditions; salary; relationship with supervisor; relationship with peers; personal life; status; and security. Herzberg's analysis of the data he gathered for his study led him to conclude that the absence or

weakness of these factors will lead to job dissatisfaction, but the presence of them does not provide the feeling of satisfaction. When an employee perceives that he does not receive fair pay, or, when he does not like the style in which he is supervised, the result will be dissatisfaction. Conversely, even when the pay is fair or the supervision style is good, it will not provide him with a feeling of satisfaction.

Herzberg proceeded to identify a second set of factors, which he referred to as “Motivation Factors” or “Satisfiers”. He claimed that these Satisfiers are “intrinsic factors”, that is, factors mainly related to the nature of the job itself, such as: creativity, achievement, recognition, responsibility, advancement, and growth. These factors will lead to job satisfaction if they are present, while indifferent or neutral feelings will result from the absence of them.

In a later study, Herzberg (1966), identified two kinds of human need. The first kind is physical need, which springs from the fact that human beings are living organisms, and have the same basic needs that all organisms have. The second kind is psychological need, which stems from the unique nature of human beings, their self-awareness, their ability to think and their desire for growth and development. In this study, Herzberg again asserted that the Hygiene Factors cause job dissatisfaction, and that the Motivation Factors are the primary causes of job satisfaction. He asked 1685 employees to describe events when they felt extreme satisfaction or extreme dissatisfaction. The results of this investigation encouraged Herzberg to suggest that a new approach, job enrichment, should be used to improve satisfaction in the work place. Job enrichment is completely different from job enlargement, which means expanding workers tasks. It

also differs from job rotation which entails using the employee in a variety of jobs to prevent him from becoming tired of repetitive or tedious work.

Taylor (1979) summarised steps, which constitute job enrichment as follows:

1. Extending the boundaries of the individual's responsibilities by adding to his duties others naturally associated with them;
2. Concentrating together the more technical jobs and creating more specialists to do them;
3. Giving the individual more freedom to set his own objectives while increasing his accountability for what he does;
4. Reducing the amount of supervision to which individuals are subject;
5. Creating natural units of work and giving the individual more authority to make decisions within the unit;
6. Introducing reasonable, challenging and exciting jobs accompanied by the requisite training to handle them effectively.

Since its development, Herzberg's theory has been the subject of a number of important studies. The Two-Factor Theory brought new and attractive suggestions to the field of job satisfaction. Because of this, it has been researched and tested thoroughly. Like Maslow's theory, it is frequently cited by other theorists as a useful and influential approach to understanding job satisfaction, and is considered to have both strong and weak points.

One of the generally recognised advantages of the theory is that it is based on empirical studies of actual individuals' experiences in the work place. Hence, it cannot be

dismissed as mere speculation by an individual theorist about abstract human needs as they relate to hypothetical work situations (Paul and Robertson, 1970). Another strength of the theory is that it resulted in the development and application of job enrichment strategies that are aimed at increasing satisfaction in the work place.

However, Herzberg's theory has also been subject to a considerable amount of fundamental criticism. Many theorists including King (1970), Namer (1990), Korman (1971), Furnham (1992), and McKenna (1987) have raised concerns about the methodology Herzberg employed when developing the theory. Furthermore, some critics have argued that Herzberg's account fails to examine the overall effect produced by the interaction of the Hygiene and Motivation Factors. Herzberg merely identified the two sets of factors as the causes of job dissatisfaction and job satisfaction respectively, but he did not say how the two factors combine to create a low or high level of overall job satisfaction (Gruneberg, 1979). Finally, and probably most significantly, the theory's core distinction between the two factors has been widely dismissed. Herzberg's, central notion of intrinsic Motivation Factors that can produce job satisfaction but do not contribute to dissatisfaction and extrinsic Hygiene Factors that can produce job dissatisfaction but do not contribute to satisfaction has not been particularly well supported by the conclusions of other researchers. On the contrary, there seems to be a fairly strong consensus amongst the researchers in this field that no clear distinction can be made between factors causing satisfaction and those causing dissatisfaction. For example, Herzberg viewed salary as a Hygiene Factor that would not contribute to satisfaction, but which might generate dissatisfaction if the employee perceived his salary to be inadequate. While that conception may be accurate with respect to some employees, a number of researchers have concluded that some workers

derive considerable satisfaction and motivation from their salaries (Vroom, 1964; Riggio, 1990; and Gruneberg, 1979).

This researcher believes that, although much of the criticism directed at it is valid, Herzberg's Two-Factor Theory has contributed significantly to the current understanding of job satisfaction. Since he based his theory on empirical data, it has contributed a great deal to our knowledge and understanding of the nature of job satisfaction in actual work environments, and has led to the development of practical job enrichment strategies. Furthermore, the researcher feels that Herzberg's distinction between intrinsic and extrinsic factors is a valid and important one, although it cannot be conceded that only the former produce satisfaction while only the latter produce dissatisfaction. The fact remains that there is a real and significant qualitative difference between factors related to the nature of the work itself and factors that relate to the context of the job or the work environment. Finally, the researcher feels that, based on Herzberg's observations, organisations may be able to distinguish between factors that mainly create employee satisfaction and those that mainly create dissatisfaction. Rather than relying on Herzberg's exact criteria however, organisations should develop their own criteria based on detailed knowledge of the work setting and of employee concerns. Herzberg's theory that salary is a Hygiene Factor that tends to produce only dissatisfaction could, perhaps, be applied to some extent in western societies, because of social individualism, government policies such as unemployment and retirement benefits, etc. However, it is extremely difficult to accept that it could be valid in third world societies where salary continues to be most workers' main resource for securing life needs.

### **3.3.3 Other Significant Theories of Job Satisfaction**

#### ***1) Vroom's Expectancy Theory***

Expectancy Theory, developed by Victor Vroom (1964), is based on the concept that peoples' expectations are their key motivators. In essence, Vroom argued that people go to work and put in effort in the expectation of being rewarded. For example, if a student expected to receive a scholarship from his university as a result of obtaining a high grade in an exam, he would work hard at fulfilling the perceived requirement in order to attain the expected reward.

The individual subject's perceptions are of crucial importance. People have their own individual rationales for deciding whether or not it is worth making a certain effort to achieve an expected outcome. Employees weigh up the anticipated outcomes, make their own calculations, and select the outcome that seems most valuable to them. If a given employee is rewarded unfairly or obtains less than his expectation he will be dissatisfied. However satisfaction will be achieved if the outcome corresponds to his expectations, even if it does not necessarily correspond with what might be viewed from a more objective standpoint as his active needs in terms of pay, recognition, promotional opportunity, etc. (Joynt, 1975).

This is not to say that factors such as pay and recognition are unimportant. On the contrary, Vroom suggested that the most important factors in determining job satisfaction are pay, promotional opportunity, favourable supervision, control of work, interaction with peers, and participation in decision making. The point is that these factors are important not because they have some sort of inherent or abstract value, but rather, because they tend to figure prominently in the expectations of most workers.



Even if factors such as good pay could be established as being “standard” job satisfaction requirements, it would still be difficult to construct a pay scale that would satisfy everyone. Individual differences play an important role in determining job satisfaction. A level of pay that would satisfy one worker’s expectations would not necessarily satisfy another’s expectations.

Vroom (1969), in his review of a number of studies identified four variables that determine the attitude of a person towards his job. These variables are:

1. The number of particular classes of outcome, such as pay, status, acceptance and influence, attained by the person as a consequence of his occupancy of that role.
2. The strength of the person’s desire for, or aversion to, outcomes in these classes.
3. The number of these outcomes believed by the person to be received by others in comparable positions.
4. The number of outcomes which the person expected to receive, or has received, at earlier points in time.

Expectancy Theory has made an important and influential contribution to the overall body of theory about job satisfaction and motivation, particularly with respect to shaping our understanding concerning how different workers in almost identical job situations can experience somewhat different levels of job satisfaction. Consequently, employers and organisations are increasingly taking the level of individual employee’s expectations into account in their attempts to encourage high job satisfaction levels.

## ***2) Adams' Equity Theory***

The Equity Theory, first proposed by Adams in 1965, is perhaps the most rigorously developed statement of how individuals evaluate social exchange relationships. Basically, Adams argued that workers will be satisfied as long as they feel that they are being rewarded equally for equivalent work, while any perceived inequity causes a level of tension proportionate to the level of inequity. The reaction of a worker would constitute an effort to decrease inequity. According to this theory, equity exists only when a person's perception of his input (experience, education, qualification, effort, skills, etc.) and outcome (pay, recognition, promotion, etc.) is equal to the input and outcome of others in a similar position. In other words the ratio of a person's input to outcome must be equal, in his view, to the other person's input to outcome. If a worker's perception is that equity does exist, then satisfaction will be the result, but if this ratio is not equal, either when a person perceives that his outcomes are more than others' outcomes or less than others outcomes, dissatisfaction will be the result. Feelings of guilt will exist if his outcome is more than others, and feelings of jealousy if it is less.

Adams' theory has received considerable attention and support from researchers such as Muchinsky (1997) and Furnham (1992). However, Vroom (1969) argued that the complexity of this theory needs a precise test, which is very difficult. Mowday (1987) questioned whether people really feel guilt or are unhappy if they are overpaid. The feeling of equity or inequity will depend on the worker's perception, which may be inaccurate, not to mention potential individual differences in terms of the sensitivity to equity ratios and the balance of preferences (Riggio, 1990). Gordon, believed that the Equity Theory oversimplified the motivational issues by not explicitly considering

individual needs, values, or personalities (Gordon, 1996). Nevertheless, this theory has received considerable attention especially in the field of motivation.

The researcher would argue that the Equity Theory is an attempt to develop a conceptual framework for a basic standard of fairness that is, undoubtedly, very important in dealing with people. Adams was hitting the right point in suggesting that the most sensitive factor in motivation is the perceived fairness of the reward. People certainly do expect their input to be rewarded fairly and he was right in saying that people evaluate the fairness of their personal outcome by comparing it to what they perceive as the outcomes of others.

### ***3) Lawler's Comparison Model***

A Comparison Model was developed by Lawler (1973) which suggested that an employee's satisfaction with his or her job is determined by a comparison between what he or she believes that he should receive from his job such as pay, status, recognition, etc., with: 1) what he actually receives; and 2) what he perceives that others receive.

According to this model the comparison depends on:

1. Personal inputs; such as skill, experience, training, effort, age, seniority, education, company loyalty, past and present performance;
2. Job characteristics; such as amount of responsibility, level of difficulty, time span;
3. Perceived outcomes of others to whom reference may be made;
4. Actual outcomes received.

A worker will be satisfied if he receives the outcome that he expects to receive, provided that this outcome is equal to that of workers in similar situations. Effectively,

Lawler's Comparison Model is an attempt to combine Expectancy Theory with Equity Theory to produce a more comprehensive picture of worker motivation and job satisfaction.

The researcher believes that Lawler's model is a valuable contribution to job satisfaction theory. Furnham (1992) argued that the model relies on the questionable assumption that people's perceptions of their own input and outcome and others' input and outcome are accurate. The researcher would note that this criticism could probably be applied to both Expectancy Theory and Equity Theory as well. However, he would argue that the validity of these motivational theories does not really rest on the assumption that workers' expectations and perceptions are realistic or accurate. The theories simply point out that expectations and perceptions, irrespective of the realism or accuracy of their content, are important factors which must be taken into account if high levels of motivation and job satisfaction are to be achieved and maintained. Naturally, it might be difficult, if not impossible, to satisfy a worker with unrealistic expectations, or inaccurate perceptions concerning either his own inputs and outcomes or those of others. However, it would certainly be unlikely that any progress could be made towards satisfying such an employee, or even a less problematic one, if the employer made no attempt to understand or respond to the expectations and perceptions that help to shape that individual's attitudes and behaviour.

#### ***4) Locke's Value Theory***

Another influential theory is the Value Theory propounded by Locke in 1976, which assumes that job satisfaction depends on whether or not a particular job provides the worker with what he wants, desires or values. Locke argued that job satisfaction, or a

lack thereof, is the result of a comparison process that a worker makes between his values and desires, on the one hand, and the outcome he actually receives from his job, on the other hand. If a worker attains what he desires, he will be satisfied, but if not, dissatisfaction will be the result.

Locke (1976) identified the most relevant factors conducive to job satisfaction as follows: 1) mentally challenging work with which the individual can cope successfully; 2) personal interest in the work itself; 3) work which is not too physically tiring; 4) rewards for performance which are just, informative, and in line with the individual's personal aspirations; 5) working conditions which are compatible with the individual's physical needs and which facilitate the accomplishment of his work goals; 6) high self-esteem on the part of the employee; and 7) like-minded agents in the work place who minimise conflict and ambiguity and who help the employee to attain job values such as interesting work, pay and promotions.

According to this theory, the level of satisfaction of an individual worker depends on: 1) the amount of value he assigns to each of these factors; and 2) the extent of the discrepancy between what he desires and what he receives. In order to achieve and maintain high levels of job satisfaction, organisations must make an effort to understand and account for each individual's distinctive values and expectations. For example, one worker might attach the highest value to his salary while another assigns a higher value to working conditions. As the priority of values differs, the employer would need to take different steps to keep the two employees happy.

### **3.3.4 Some Other Theories of Job Satisfaction**

After reviewing a number of studies on job satisfaction, Gilmer and Deci (1977) argued that job satisfaction can be associated with the interaction of rewards, personal factors and perceptions. They identify four factors that affect job satisfaction. The first factor is the employee's actual outcome from a job (such as pay, fringe benefits, job challenge, supervision, variety in work, relationship with other workers, etc.) The greater the outcome is, the greater the level of satisfaction is likely to be. The second factor is the amount of expected rewards an employee receives. If employees receive what they expect, or more, they will be satisfied, irrespective of the actual level or kind of reward. The third factor is the employee's perception of the equity of the rewards he receives, which will be based on a comparison between his input and outcome and the inputs and outcomes of other employees in a similar position. The greater the degree of equity is, the more likely it is that satisfaction will result. The final factor is the individual differences among employees in terms of their desired outcomes. In other words, when an employee is in need of money, pay and financial rewards will satisfy him, whereas a employee who is in need of growth or advancement will only be satisfied when he gets that.

Another social comparison approach suggested that people compare their feeling of satisfaction with the feelings of other workers in a similar position and will be influenced by them (Salancik and Pfeffer, 1977). McCormick and Ilgen (1985) were pleased with the idea that satisfaction derives from a comparison process between what the individual receives from his job and the workers' collective standards. Thus, if the individual perceives that what he or she receives from his or her job corresponds with the general standard of another individual in a similar position, he will be satisfied.

Nonetheless, there is a question mark concerning whether the standard can be seen as supplying basic needs or value needs (Muchinsky, 1997).

Spector (1982) argued that satisfaction at work is related to a significant extent to employees' characteristics. He distinguished between two kinds of worker. Firstly; workers who can control events related to their work whom he called "internals", and secondly; workers who are controlled by outside forces which he termed "externals". Spector built his argument on the norm of differences in personality. He suggested that workers should be helped to exert control in many areas of their work such as task accomplishment, operating procedures, relationships with supervisor and subordinates, etc. He argued that internals demonstrate more satisfaction than externals, and gave four reasons for this. First, he held that internals are more likely than externals to take action about unsatisfactory work situations. In other words, dissatisfied internals tend to quit their jobs, while the externals will stay and push for changes. Second, he observed that internals are more likely than externals to benefit from performance related rewards. Third, he noted that internals have a better chance of promotion and salary increase, which leads them to a feeling of satisfaction. Fourth, he contended that internals have a better chance to manage in the work place or to leave an unsatisfactory situation.

Agreeing to some extent with Herzberg's theory, Robinson (1984) attributes job satisfaction to one main set of factors, whereas he thinks job dissatisfaction is caused by a second set of factors. He proceeds to identify a third group of factors which may cause either satisfaction or dissatisfaction. According to Robinson, the factors that cause satisfaction are: 1) the nature and extent of the work; 2) the importance of the job in the general scheme of things; 3) the degree of responsibility and accountability in the job;

4) being part of an acceptable team; 5) appropriate incentives and rewards; 6) receiving credit where it is due; and 7) personal achievement. Robinson's second set of factors which relate to job dissatisfaction are: 1) organisational bureaucracy; 2) management and supervision; 3) terms and conditions of employment; 4) unrewarding work; 5) colleagues; 6) uncertainty about the future; and 7) lack of achievement. The final set of factors which can produce both job satisfaction and job dissatisfaction are: 1) strong management; 2) work pressure; 3) competition; 4) punishment; and 5) change. A similar criticism to that which was directed at Herzberg's Two Factor theory (in terms of the distinction that was drawn between factors causing satisfaction and those causing dissatisfaction) may also be applied to Robinson's argument.

### **3.3.5 General Conclusions Concerning Theories of Job Satisfaction**

This researcher feels that the main ideas which can be inferred from the theories presented in this section can be summarised as follows:

1. Employees seek to fulfil their needs as individual human beings by a number of different means. For many, jobs are either a necessary, or a popular and attractive, way of fulfilling these needs.
2. The level of a worker's job satisfaction is largely determined by various factors which are related to: 1) his individual circumstances, needs, values and preferences; 2) the nature of his work itself; and 3) his work environment and the degree of fit between his motivations and goals and the employing organisation's motivations, goals, and policies.
3. There are differences between individual employees in terms of the amounts and kinds of outcomes or needs they seek to fulfil. One employee might place a primary



value on pay, while another would be more concerned with increased recognition, and so on.

4. Employees' expectations of, and aspirations concerning, their outcomes play a significant role in determining their level of job satisfaction. If employees receive outcomes that are in line with their expectations, a good level of job satisfaction will result.
5. The level of an individual worker's satisfaction is also shaped by a comparison process that involves his perceptions concerning: 1) his own job inputs, in terms of education and training, experience, amount of work, job performance, etc.; 2) the inputs of other employees in similar positions; 3) his outcomes, in terms of the standards of pay and other rewards; and 4) the outcomes of other employees in similar positions. The greater the level of perceived equity, or fairness, in relation to all employees' inputs and outcomes, the higher the level of job satisfaction is likely to be.

### **3.4 Factors Associated with Job Satisfaction**

In addition to the mainly theoretical literature presented in the last section, a great deal has been written about the subject of job satisfaction as a result of many empirical studies that have been conducted in various settings. Most of the studies were carried out in the fields of business or education. In addition, some studies have looked at other fields such as health-care, and social work. For the most part, the research focus of these empirical studies has been related to identifying the specific factors that influence and are associated with the construction and maintenance of job satisfaction. Some of the factors identified by the different researchers have to do with demographic variables and personal characteristics. Other factors consist of what Herzberg would classify as: 1)

“intrinsic” variables that have to do with the nature of the work itself; and 2) “extrinsic” variables that relate to the job context or the job environment.

The researcher would observe, at this point, that there is a general lack of agreement, particularly with respect to the conclusions of empirical researchers, concerning which factors are most significant. Some scholars identify one factor or a small group of factors, while others identify another factor or group of factors. One might expect some variance between the conclusions of scholars looking at different work settings, and the results of the various studies the researcher has examined certainly seem to fulfil that expectation. However, there is also a significant amount of variance between the results of researchers looking at similar work settings. The researcher would speculate that these differences relate to the theoretical assumptions of the various scholars, and more importantly, how these assumptions translated into their respective methodologies, particularly the tools (i.e., questionnaires, etc.) they used to measure job satisfaction levels.

Irrespective of the reasons behind it, the general lack of agreement in the existing literature concerning which factors are most significant made it somewhat difficult for the researcher to focus his attention on a small group of job satisfaction factors. The fact that the researcher was looking at the topic of job satisfaction in the context of a previously unexamined work setting (i.e., the Saudi offset companies) made it even more difficult to narrow the range of factors. Consequently, the researcher decided to conduct his literature review with the aim of identifying a fairly broad composite list of potential job satisfaction factors for incorporation into his empirical research project.

In this section, the significant factors most widely cited both in the theoretical literature and in the various empirical studies will be examined in some detail. The section is divided into four sub-sections. Section 3.4.1 will look at how personal factors such as demographic variables and personality traits have been found by researchers to relate to job satisfaction levels. Section 3.4.2 will look at the intrinsic variables, or how the nature of the employee's work itself has been seen to be related to job satisfaction. And section 3.4.3 will examine the significance of extrinsic variables, factors related to the context of the work, or the work environment. Specifically, these extrinsic factors include: 1) pay; 2) working conditions; 3) supervision; 4) work group; 5) recognition; 6) promotion; and 7) organisational characteristics and policies. Section 3.4.4 will present a summary and conclusion for the whole section.

### **3.4.1 Personal Factors**

A number of the factors that many researchers have found to be associated with job satisfaction are related to demographic variables and personal characteristics including: 1) age and experience; 2) gender; 3) personality traits and psychological health; and 4) level of education.

#### ***1) Age and Experience***

Age and experience are fairly widely considered to be important personal factors that influence job satisfaction. Although the two factors are qualitatively different in some respects, length of job experience and age tend to be so closely interlinked that some scholars feel that they may be considered as the same phenomenon (Schultz, 1978). With respect to age, it is probably not so much the ageing process itself that affects satisfaction with the job, as associated changes in terms of goals and priorities, general

attitudes and responses, levels of expectation, etc. Research has found that, on the whole, older employees are more satisfied than the young (Muchinsky, 1997; and Nash, 1985). This may be largely due to the fact that realistic expectations develop with life and work experience. Greater aspirations and ambitions may be found among young employees. If they should fail to fulfil these, it creates a gap between values and outcomes which may lead to dissatisfaction. By contrast older and more experienced employees may have a tendency to adjust the level of their aspirations and ambitions based on what their experience of previous outcomes has taught them to regard as the norm.

Schultz (1978) stated three possible explanations for the observation that age generally has a positive influence on job satisfaction levels. First, he noted that young workers change their jobs frequently seeking to fulfil their needs. Thus, the likelihood of satisfaction diminishes for this age group. Second, the sense of realism becomes stronger as workers grow older. Finally, older workers are most likely to fulfil their needs through increased salary, promotion and similar forms of job advancement..

A study was conducted recently to examine the impact of age on job satisfaction (Oswald & Warr, 1996). This study was based on the British Household Panel Study. The results showed that overall job satisfaction is U-shaped in relation with age. The data indicated that, with no other control variables, satisfaction declines on average until the age of approximately 31 and rises thereafter. In fact, after controlling about 80 variables, the study showed a strongly significant U-shaped relationship between age and satisfaction with a minimum level of satisfaction at age 36.

Another study (Luthans and Thomas, 1989), which involved 81 employees from several organisations, with ages ranging from 23 to 62, also posited a definite correlation between age and job satisfaction. In addition to identifying an increase in job satisfaction after several years of initial work experience, the researchers found that age affected satisfaction negatively as workers approached the age of retirement.

Kiyak, Namazi, and Kahana (1997) presented a model that links personal and job-related factors to job satisfaction, job commitment, and turnover among women working in facilities serving older persons. A total of 308 women working in six nursing homes and 12 community service agencies in Detroit, Michigan, and Seattle, Washington, were surveyed. The results of the study indicated that professional staff and those who held positive attitudes toward the elders expressed higher job satisfaction than did other employees. Also, personal characteristics such as age, length of employment, and the type of agency for which they worked influenced job satisfaction. Satisfaction was greatest among female employees who were older, were married, had been on the job for longer and had a professional position. .

Green, Johnson, Campbell (1991) investigated the difference in the level of teachers' job satisfaction and job stress according to their age, teaching experience and school size. The data was collected from 85 urban schools (N=229) in North Florida and South Georgia. The results of the study indicated that teachers' satisfaction was related to increased school size. The ages of teachers as well as their years of experience were not found to be significant factors in their job satisfaction.

However, in another survey of teachers, Chaplain (1995) reported that significant differences were found between teachers of different ages and length of teaching experience. This study collected data from primary school teachers (N=267) employed in Northern and Eastern regions of England.

## **2) Gender**

Gender is another personal factor that is held by many researchers to influence the likelihood of job satisfaction. The research does not suggest a clear-cut positive or negative correlation between gender and satisfaction across a number of different fields, but individual studies in specific fields have observed significant gender-based differences in job satisfaction levels.

Gender, was one of the variables examined in the context of a study by Ellis and Bernhardt (1992). They used the Job Diagnostic Survey (JDS) developed by Hackman and Oldham (1974) to survey a sample of 207 teachers in Fairfield County, Connecticut. Their study examined the relationship between the design of the job of teaching and the motivational needs of teachers. The study indicated that female teachers were more significantly satisfied in their jobs than male teachers. They were more satisfied with the level of feedback and the quality of supervision. They had a greater degree of overall job satisfaction, and were more satisfied with the challenges of their jobs.

Hulin and Smith (1964) conducted an empirical study among 296 male workers and 163 female workers in four different plants. They found that female workers are less satisfied than male workers and they suggested considering other situational factors, which may cause dissatisfaction such as pay, education, chances of promotion etc.

In a recent study, Mason (1995) investigated the relation between gender and job satisfaction. 13,000 U.S. employees from 130 organisations and divisions across a variety of industries were surveyed. He found that women and men in management apparently did not differ significantly from one another in their sources of satisfaction at work.

However, the general impression one gains from reviewing many different studies indicates an inconsistent relationship between job satisfaction and gender. This inconsistency may be due to different factors such as pay, promotion systems, experience, age, etc. In looking at the gender issue, Schultz (1978) argued that there are different sources of satisfaction for men and women. According to Schultz, there is a set of factors which vary with gender and influence the level of satisfaction in the work place. These included such things as differences in social life and differences in pay and promotion prospects in situations where legislation did not protect women's rights. Gruneberg (1979) argued that female workers enjoy jobs that have social characteristics and low skill utilisation. Muchinsky (1997) pointed out that males and females have different attitudes towards their job. These attitudes are influenced by the social and family responsibilities associated with the respective sexes.

### ***3) Personality Traits and Psychological Health***

A number of studies have looked at the impact that different personality traits and mental health states can potentially have on levels of job satisfaction.

Morrison (1996) used the Minnesota Job Satisfaction Questionnaire (MSQ) to examine the relationship between job satisfaction and personality, subjective well being, and job characteristics. He collected data from 307 U.S. franchisees from four industries. The study found that both extroversion and subjective well-being had significant positive influences on job satisfaction.

Personality traits also were the subject of another study (Organ & Lingl, 1995). This study investigated the relationship between two personality types, the agreeable personality and the conscientious personality, and both job satisfaction and organisational citizenship behaviour. A sample of 99 employees from two firms (one U.S and another U.K) participated in the study. The study used the Job Descriptive Index (JDI; McCare & Costa's, 1987) the findings indicated that there are linkages between personality type and job satisfaction. Agreeable personality seems to be associated with job satisfaction and to have considerable relevance to the capacity for experiencing satisfaction at work. Conscientiousness was a significant negative predictor of satisfaction with co-workers when a control for the effect of agreeable personality was applied.

Petrovski and Gleeson (1997) examined the relationship between job satisfaction and psychological health in people with an intellectual disability in competitive employment. Specifically, the researchers investigated the nature of the relationship between job satisfaction and four respective measures of psychological health. Those measures were self-esteem, stigma, loneliness, and aspirations. 31 workers completed the questionnaire that was designed for the study. The results indicated that workers with intellectual disabilities tended to feel uncomfortable and left out in their workplace.



In fact, the study revealed that females experienced significantly more loneliness than males. They tended to score lower on job satisfaction, self-esteem, aspirations, and higher on awareness of stigma.

#### ***4) Level of Education***

The level of education is another personal factor, which has been the object of a number of studies. Researchers have attempted to determine the nature of the relationship between job satisfaction and a worker's level of education. Some have reported a positive correlation between a high level of education and high job satisfaction. For example, Nash (1985) reported that better educated people experience more job satisfaction. Other scholars have suggested a more complex relationship, stressing that higher education levels generate higher expectations. Satisfaction levels depend upon whether or not these expectations are fulfilled.

Ribeaux and Poppleton (1978) observed that people may expend a lot of effort to get a degree in education with the aim of using the qualification later on to get a better job in terms of pay, status, security, benefits, etc. Highly educated employees will generally expect, and feel that they deserve, such education-related positive outcomes from their jobs. If these outcomes do not materialise and their expectations are not met, dissatisfaction may result

An empirical study was conducted by Mottaz (1984) among 1385 full-time employees in different occupational groups from six different organisations. The study indicated that the level of education might lead to rewards, which would finally lead to

satisfaction. On the other hand it was observed that lack of rewards corresponding to the level of education might reduce the level of satisfaction.

In an empirical study involving 1455 workers, Martin and Shehan (1989) concluded that more highly educated workers tend to be rewarded by being placed in jobs characterised by greater task autonomy, task significance and task involvement. They concluded that education has a positive correlation with job satisfaction. Furthermore, they observed that they did not find evidence to support the concept that expectations related to the level of education (in terms of rewards or outcome from work) might substantially reduce satisfaction if they are not met.

### **3.4.2 Intrinsic Factors**

The number and nature of the functions which individual employees are called upon to perform can vary tremendously from one job to another. The nature of the work itself has been widely discussed by researchers and there is a strong consensus that it can have a major influence on a worker's level of job satisfaction (Gruneberg, 1979).

Success and achievement are considered by many researchers to be important factors in determining job satisfaction. Workers want more than just to do things; they want success and to complete an identified and clear task successfully so that they can see the result of their effort. This will lead them ultimately to experience satisfaction from their job (Locke, 1965; Vroom ,1964; and Herzberg, 1966).

Feelings related to security also affect the level of job satisfaction. People are happier with work that provides them with state health care, stability of employment insurance,

and pensions. This desire may increase among unskilled or semi-skilled workers or lower income employees (Argyle, 1989). Additionally it is said that the absence of this factor may lead to dissatisfaction (Herzberg, 1993).

According to two studies presented by Hackman (with Lawler, 1971, and with Oldham, 1976) there are five job characteristics which enhance work satisfaction. These are: 1) task identity, the clarity and independence of tasks which workers perform; 2) task significance, the importance of tasks in the life and work of others; 3) skill variety, the demand of using different skills and talents in the job; 4) autonomy, the sense of freedom and independence in doing tasks; and 5) feedback, receiving clear appreciation or other personal rewards as a direct result of one's work.

A list of work related factors similar to those identified by Hackman, et. al., is given by Armstrong, (1988) and Livy (1988). These factors include: variety; challenge; responsibility; control over work methods; control over work pace; the opportunity to use skills and abilities; and influence in decision making. Schultz (1978) agreed that much dissatisfaction might derive from the features of the job itself such as lack of responsibility, or lack of autonomy.

Locke (1976) reviewed several related studies in an attempt to find the major features in work that boost satisfaction. He concluded that the work attributes that influence job satisfaction are: the use of workers' skills and abilities; opportunities for learning new things; creativity; variety; difficulty; amount of work; responsibility; performance pressure; and autonomy. All these factors contain a sense of challenge. He argued that too little or too much challenge can result in job dissatisfaction. If the challenge is too

great for the individual to cope with, he will feel frustrated and a failure. If the individual senses that he will be able to meet the challenge, then he will feel pleased and satisfied.

Other researchers have agreed with Locke's assertion that, if a job becomes a source of unfavourable stress, then the stress may cause dissatisfaction. Riggio (1990) identified some organisational sources of stress. He pointed out that stress may be caused by conditions including: work overload or the job being too challenging; the under-utilisation of employees skills and abilities; job uncertainty which develops when tasks are not clearly identified and differentiated; the lack of control which results when employees do not have enough autonomy to do their jobs properly; and lack of harmony in interpersonal relationships in the work place. Miner (1992) pointed out that job satisfaction and stress are highly related, to the extent that low job satisfaction is associated with a variety of stress symptoms such as absenteeism and staff turnover. McCormick and Ilgen, (1985) reached similar conclusions. Kiely (1986) found that role stress, role conflict and job related problems are negatively and consistently related to job satisfaction. And Fraser (1983) reviewed several kinds of studies and came to the firm conclusion that a complex and causal relationship exists between job stress and dissatisfaction.

A considerable number of empirical studies have been conducted in order to examine the affect on job satisfaction levels of the types of job characteristics identified by the scholars cited above.

Kiely (1986) conducted a study among 108 employees in four companies. The results indicate that workers enjoy a high degree of predictability and certainty in their job. He suggested that jobs should be designed to contain a sense of autonomy and use of variety of skills.

The work-force size and multifaceted job satisfaction was the subject of a cross national study (Dekker, Barling, & Kelloway, 1996). This study was based on data from two national surveys in the United States and Canada. The survey included a cross-sectional sample (N=12,686). It was a nationally representative sample that included Blacks, Hispanics, and low-income Whites. The results of the study showed that work-force size was significantly correlated with satisfaction about standards of pay, the number of benefits offered, opportunity for promotion, exposure to unhealthy conditions and job security. Work-force size also correlated with satisfaction about the opportunity to do one's best work and supervisor competence. Work-force size was not found to be significantly related to satisfaction with co-workers, physical surroundings, or value of experience gained.

Freeborn and Hooker (1995) examined how physician's assistants (PA) evaluate their experience practicing in a large health organisation. The study also compared the PA's attitudes and satisfaction with those of other non-physician providers (NPP). Five thousand of the Northwest region of Kaiser Permanent Plan employees were surveyed. The study found that most PA's in the managed health-care plan were satisfied with their jobs and with specific aspects of work. The majority of PA's were satisfied with salary, fringe benefits, supervision, level of responsibilities, working hours, relationship with co-workers, job security, and opportunities for continuing education. However,

they expressed somewhat lower levels of satisfaction with control over the workplace and advancement opportunities.

An empirical study was conducted by Bateman and Strass (1983) in an attempt to find out the relationship between job tension and employee level of satisfaction. This study conducted among 129 nurses from four hospitals indicated a clear relationship between low job satisfaction and stress. The study found that one consequence of the failure to reduce job tension appeared to have been an erosion in the standing of the supervisor in the eyes of the other personnel.

Another study (Abouserie, 1996) was conducted to identify sources of stress and its relationship with job satisfaction for university academic staff. The study indicated that academic staff rated work as the most significant cause of stress in their lives. Conducting research was the main cause of stress at work. The results also showed a negative correlation between stress and job satisfaction.

Psychiatric social workers from the Canadian hospitals reported a fairly positive level of job satisfaction. Their satisfaction was accounted for in terms of one intrinsic or motivation factor, which was concerned with the nature of the work itself and three smaller extrinsic factors: educational opportunities, administrative access, and pay. Overall job satisfaction was found to be primarily a function of the intrinsic factor. Respect from other professionals was also found to be a major correlate of both position satisfaction and overall satisfaction (Marriott, Sexton, & Staley, 1994).

Morgan et al. (1995) found that variety of work and being able to have strategic input were the most satisfying factors for marketing managers.

Kadushin and Kulys (1995), studied the overall job satisfaction experienced by 80 social work discharge planners and identified autonomy as a predictor of job satisfaction.

A study conducted with a stratified sample of counsellor educators found that most of the respondents enjoy their teaching role and derive satisfaction from it. They reported that the lack of an institutional reward becomes important only when the intrinsic rewards are missing (Carter, Bowman, Kher, & Bowman, 1994).

Teaching special needs students was investigated as a factor of job satisfaction (Lobosco, & Newman, 1992). The study attempted to examine the relationship between working with students who are gifted and talented and job satisfaction. The study found that teaching these kinds of students was related to increased job satisfaction. In contrast, working with students who were having learning difficulties was either not related or negatively related to job satisfaction.

### **3.4.3 Extrinsic Factors**

#### ***1) Pay***

It is generally recognised that the amount of money that is received by the employee plays a great role in satisfying the employee's needs and fulfilling his desires. For many years, researchers considered pay to be the main source of satisfaction, although recently some psychologists have argued against it.

Many scholars studying job satisfaction have commented on the significance of pay in relation to worker attitudes. It will be remembered that pay was considered a hygiene factor in Herzberg's theory, that is, a factor that determines only dissatisfaction and has nothing to do with raising levels of satisfaction. By contrast, Lawler (1973) argued that pay satisfaction is one of the strongest factors in job satisfaction. Schultz (1978) argued that the way in which salary is paid is more important in determining job satisfaction than the amount received. He suggested that the confidential pay system is a source of dissatisfaction because it may lead employees to overestimate what others are being paid. Gruneberg (1979) discussed pay satisfaction thoroughly and found out that pay is an essential aspect of job satisfaction. Locke (1984) pointed out that money is the universal means of exchange. People value money as a means to obtain other needed values. More than that, it is considered a way of measuring competence. He elaborated to say that the feeling of fairness about a pay system does not always lead to satisfaction unless this money is enough to satisfy the employee's needs. Armstrong (1988) also acknowledged that pay is important, but noted that it has not been possible to establish a direct link between the level of pay and the level of job satisfaction. He proceeded to observe that money is a powerful force because it leads to other ends, which may satisfy employees' values. Hackett (1992) believed that pay should be regarded as equitable by employees (with regard to their performance and other similar workers) to ensure its positive influence. He goes on to mention several consequences if pay is perceived to be unfair such as high staff turnover, restriction of output, and real dissatisfaction.

Other extrinsic factors such as health care, retirement and social security, salary and working environment were found to affect teacher job satisfaction (Nelson, 1994). A



recent study showed that only 45% of the teachers reported that they were satisfied with their salaries, while 55% were not. Among Black and non-Hispanic teachers in public school, 73% "strongly disagreed" or "disagreed" with the statement that they are satisfied with their salaries (Meek, 1998).

In this researcher's opinion, pay should be considered as the main source of job satisfaction. Results of different studies have indicated that pay is generally regarded by employees as one of the highest three or four sources of satisfaction, but is rarely acknowledged as the highest. Many theorists attribute this to the importance of other factors, but it might also be observed that people tend to have a strong desire not to be seen as materialistic. Consequently, they are reluctant to openly acknowledge pay as a first choice of satisfaction. One might ask: why do employees go on strike, seek promotion, compete with each other, or look for other work even when they have a good job? The researcher would argue that it is all to satisfy their needs through pay. Any organisation has a moral obligation to reward an employee for his efforts because of the mutual benefit. In order to avoid dissatisfaction, pay should be fair, equitable and in line with the reasonable expectations of the employee

## ***2) Working Conditions***

Working conditions constitute a factor that is difficult to examine comprehensively, as it is related to many aspects of work. Concern about working conditions can include such things as temperature, noise, stress, physical activity, fatigue, safety, accident prevention and work hours (Muchinsky, 1997). The literature in this area emphasises the importance of improving work conditions to avoid any negative reaction from

workers such as stress, dissatisfaction and other unfavourable consequences (Ashour, 1983).

Locke (1976) summarised the norms that determined employee's pleasant working conditions as follows;

1. The desire for physical comfort, based on the employee's physical needs;
2. The desire for conditions which facilitate and/or do not block the attainment of the employee's work goals.

Working conditions have also been found to be associated with job satisfaction in empirical studies. For example, freedom to decide how to do the work, responsiveness of students, materials and equipment, and class size were four of the top factors that affect job satisfaction according to a 1990 survey of teachers conducted by Ball & Stenlund. In another study (Taylor, & Tashakori, 1995), aspects of school climate were found to be strong predictors of job satisfaction. Those were the lack of obstacles to teaching, principal leadership, and faculty communication. Other studies suggested that the closer the schools come to developing a community, the greater teachers' job satisfaction. Also, the greater the legitimacy given to a governance regime in the school, the greater teachers' job satisfaction (Verdugo, Greenberg, Henderson, Uribe, & Schneider, 1997). On the other hand, a study conducted with a random sample of 300 public schools teachers did not support these results. It showed no significant relationship between teachers' perceptions of principals' leadership behaviour and job satisfaction among teachers (Evans, & Johnson, 1990).

### ***3) Supervision***

The quality of supervision is another one of the important factors associated with job satisfaction. This factor plays a vital role in the work place. In expressing the importance of this factor Gilmer (1966) stated that the supervisor is seen by workers both as a father figure and as an irritating boss who can affect their level of satisfaction. Bruce and Blackburn (1992) believe that supervision is the critical factor in both job satisfaction and performance. They found that commitment to do well in the workplace and to increase the level of satisfaction is related to the supervisory treatment, trust and feedback. Locke (1976) pointed out that the supervisor who seems to share his subordinates' values and takes a personal interest in them will have a positive effect on employee satisfaction. Furthermore, employees will be satisfied with their supervisor to the extent to which he or she facilitates the attaining of job values such as, freedom, good equipment, challenging goals, or rewards such as pay increases and promotion. Vroom (1964) pointed out that supervision style may cause satisfaction or dissatisfaction. In other words, the supervisor who is competent, democratic, considerate to his subordinates and has a good relationship with his employees will cause the workers to have positive feelings towards their job. A supervisor who is incompetent, personally unpleasant, too controlling or unreasonable will generate job dissatisfaction in his employees.

Researchers in the social work and health care fields, have conducted studies related to this factor of job satisfaction. For example, Evans and Thomas (1997) investigated the impact of supervision and advancement opportunities on job satisfaction among substance abuse counsellors. The researcher used the Individual Information Form (IIF) and a modified form of the Minnesota Satisfaction Questionnaire (MSQ) to survey a

231 of the 505 substance abuse counsellors in Virginia. They found substance abuse counsellors were very satisfied with their jobs. They were most satisfied with the social service, moral values, and creativity aspects of their job. They were least satisfied with company and policy practices, quality of supervision, compensation, and opportunities for advancement.

Pool (1997) investigated the relationship between job satisfaction and job related elements such as leadership behaviour, and work motivation. The sample included 47 assembly workers, 22 middle managers and 56 executives. The researcher used the Leader Behaviour Description Questionnaire Form X11 (LBDQ-X11). And the Minnesota Satisfaction Questionnaire (MSQ) to collect his data. The results of the study indicated that the most powerful predictor of job satisfaction was work motivation, explaining a 32.1% variance of the total level job satisfaction. Leadership behaviour was the second highest predictor. Also, the researcher found that leadership style proved to be a very powerful predictor (24.2%).

#### **4) Work Group**

The employee's relationship with his work group is one of the most important factors of job satisfaction. Ideally, a considerable part of an employee's contentment with his job is that he is happy with his co-workers and *vice versa*. Working in a group creates friendships, co-operation, assistance, support, and brings enjoyment to the work.

Maslow (1970) considers the need for good employee-work group relations as one of the third category, "social" needs. Maslow associated this category with the individual's need for belonging and love. According to Maslow's Needs Hierarchy, after

physiological necessities and safety requirements have been met, employees will invariably pursue their need for belonging and companionship. Therefore, assigning an employee to an isolated job may cause dissatisfaction (Armstrong, 1988). Thus, the work group is another important factor and a potential source of satisfaction or dissatisfaction. When a worker interacts socially and positively with his work-mates the sense of co-operation will lead him/her to experience satisfaction (Gruneberg, 1979). An employee seeks satisfaction through his work-mates to provide him with recognition, security, status, and the feeling of being wanted (Gilmer, 1966). According to Lawler (1973), a job that has more positive social outcomes should be more satisfying to the worker. He believed that when a person interacts with, and is accepted by, his co-workers, he would be satisfied especially in terms of social needs. Peer groups can help in raising his perception about his input and outcome, which leads ultimately to satisfaction.

Tierney (1997) investigated the influence of work group cognitive climate on employees' satisfaction and their creative efficacy. This study was conducted in a large consumer product organisation (N=215). The 32-item Kirton Adoption-Innovation Survey (KAI) was used to determine employees' cognitive styles and the basis for the cognitive climate and cognitive gap variables. Job satisfaction in Tierney's study was measured by the 14-item Job Diagnosis Survey (JDS) developed by Hackman and Oldham (1975). The researcher found a significant positive correlation between individual cognitive style and creative efficacy. This suggests that the more innovative an employees' cognitive style orientation, the greater their degree of efficacy perceptions for doing creative work. The size of the cognitive gap was not associated with the level of job satisfaction. The study found that there is a significant negative

relationship between cognitive climate and job satisfaction. This means that the more innovative the cognitive climate of work group to which the employee belongs, the lower the level of employee job satisfaction. Tierney explained this result in terms of the fact that the employees who participated in his study were working for a well-established, traditional type of company that has been in existence for many years. In addition, the stability of competitive environment leads the company to be more “mechanistic than organic” in its structure and processes. Therefore, the bureaucratic style of the company may not allow it to respond sufficiently to the innovative workers’ input, which could, ultimately, lower their satisfaction.

Another study was conducted by Ward and Holdaway (1994) in Alberta, Canada, to obtain information regarding the perceptions of principals of elementary and junior high schools concerning their job satisfaction. The researchers surveyed 225 principals and interviewed 20 of them randomly. The study found that the two highest-ranking variables for the group were working relationship with teachers and relationship with students.

### ***5) Recognition***

Recognition is a way of giving approval and acknowledgement and showing appreciation to an employee. It is one of the most important outcomes that an employee always seeks. The lack of this factor may cause feelings of dissatisfaction.

Locke (1976) stated that any given employee values praise for his work and achievement especially from his colleagues and supervisor and, furthermore, does not want to be criticised. Gruneberg (1979) gave an example of a writer who gave up

writing because of the feeling of discouragement that results from constant rejection from publishers. However, encouragement and recognition may have enhanced or boosted this writer's self-esteem.

In Japan, teachers who were satisfied in their jobs reported that they have enough recognition for their work, were regarded with respect and that the principal was successful in getting people to work together (Ninomiya, & Okato, 1990).

Merit (1995) suggested that it is necessary to supply satisfiers such as recognition to motivate employees. In a survey of 150 executives, Gillian (1994) reported that it was a lack of praise and recognition that most often pushed employees out the door. Recognition may be received through promotion, increased salary or even verbal acknowledgement.

An empirical study was conducted by Starcevich, (1972) among 600 employees in three organisational positions within a large manufacturing firm. The purpose of this study was to find out the job factor importance for satisfaction and dissatisfaction across different occupational levels. This study showed recognition as one of the most important factors affecting the level of satisfaction regardless of the occupational level of the respondent.

#### **6) *Promotion***

Promotion refers to the movement of an employee to a job within the company that has greater importance, and, usually, higher pay. Promotion serves to improve both the utilisation and motivation of employees. Such movement of individual employees to

higher jobs is widely considered to be important as a potential cause of either satisfaction or dissatisfaction in the work place because it can create positive or negative changes in the work environment, which may affect both the individual promoted and other personnel. From an individual employee's perspective, promotion is usually followed by increases in pay, responsibility, job challenge, and autonomy. It may entail a substantial change in the actual tasks that make up the employee's work, and could have a considerable impact on the employee's relationships with co-workers. These could be positive or negative influences depending largely upon whether or not the employee fits well into his new job and how fellow employees perceive and respond to the change.

Experience and a high level of education are common requirements for promotion. However, being experienced and possessing the required qualification does not always guarantee promotion since other factors may intervene in determining promotion, such as passing a promotion examination, the availability of a job or the suitability of a given employee to a particular job. If a highly qualified employee failed to be promoted over a long period of time because of one or more such obstacles, he might encounter a feeling of frustration.

In contrast to the situation of a worker who is upset at not being promoted, there are instances in which employees prefer not to be promoted. Promotion is generally desirable because it is associated with recognition and money. If a promotion increases responsibility without financial rewards not all employees will be content. Furthermore, if an employee is promoted into a job which does not fit well with his work values, he may become dissatisfied.



The affect of promotion on the level of job satisfaction was viewed by Locke (1976) as the same as the effect of pay. Hence, its influence on the employee's ambition and the values he seeks from his job is comparable. This means that an employee may view the promotion system in his organisation as being unfair yet still be satisfied because he values another aspect of his job above being promoted. Hackett, (1992) believed that promotion plays an important part in determining satisfaction, because it conveys intrinsic satisfaction through recognition and status and extrinsic satisfaction through the rewards which follow from it. Status may also be a result of promotion, which is, allied to other factors like increased salary or the work itself. Status was found to be a cause of satisfaction when employees value or desire this particular need (Argyle, 1989) or at least it contributes to lessening the possibility of dissatisfaction. Gerhart (1987) believes that status, pay and job complexity play a vital role in determining the level of an employee's job satisfaction.

An empirical study by Kiely (1986) found that the effects of a promotion on job satisfaction were largely temporary. Workers who were promoted in four companies during the eighteen-month study experienced satisfaction for a few months then experienced a return to a slightly higher level than their previous level of satisfaction before the promotion occurred.

Safia (1989) assessed the relative importance of incentives for 200 female workers (aged 16-48 years) in an electronics plant. He asked the respondents to rank a list of 12 incentive items and found that status and prestige, income, and opportunity of promotion were the most favoured motivating items. In another study, Travers and

Cooper (1993) found that lack of status and promotion were major predictors of job dissatisfaction.

### ***7) Organisation Characteristics and Policies***

The factor relating to organisation characteristics and policies is one which, to at least some extent, assigns and determines all aspects of work such as pay, task characteristics, promotion, autonomy, etc. (Locke, 1976). The structure and policy of the enterprise he works for has an overall impact on the employee's level of satisfaction. Thus, the importance of this factor stems, to a great extent, from its significant influence on other factors that have been found to influence job satisfaction.

Role ambiguity and conflict among employees has an impact on an employees' level of satisfaction because it directly and negatively affects their input and outcomes. The ambiguity may result from the immediate supervisor or from the organisation itself. In either case the result will be the same. Gruneberg (1979) stated that in bureaucratic or pyramid-shaped organisations, workers at the bottom suffer from lack of participation in decision making and difficulty in communicating with higher managers, who ignore them. This kind of organisational problem can generate significant levels of job dissatisfaction.

According to Gilmer (1966), a company's management has a vital role in determining job satisfaction especially when helping employees to feel stable in their job. Moreover, Gilmer believes that the company management is rarely a forceful reason for dissatisfaction. Similarly, Herzberg (1993) believed that the structure and policy of

enterprise is a hygiene factor. That is to say, it contributes only to job satisfaction and has nothing to do with job dissatisfaction.

Employees' levels of satisfaction can be affected even by the reputation of their organisation. A bad reputation affects employees' satisfaction negatively (Kossen, 1978).

Argyle (1989) summarises the aspects related to the organisation itself that can influence the level of job satisfaction as follows:

1. The size of the organisation-- the satisfaction level is generally higher for small size organisations;
2. The extent of structure definition-- satisfaction in less pyramid-shaped organisations tends to be higher than in organisations with sharply defined hierarchical structures;
3. Participation in decision making-- organisations that allow their employees to participate in decision making will positively affect their level of job satisfaction; and
4. The reputation of the organisation among the public and the outside sector-- which reflects several internal aspects such as skilled managers, personal policy, appraisal schemes, etc. The better the organisation's reputation is, the happier employees will be to be associated with it..

Finlay, Marin, Roman, and Blum (1995) examined the association of organisation structure with workers' satisfaction. This study used a stratified random sample of 439 private sector employees who worked for an organisation's Employee Assistance Program administrator. The study found that two of the organisation's structure

variables had significant independent positive affects on job satisfaction. These were openness in the information flow across the different levels of the organisations and the degree of standardisation of procedures. In fact, the study found that employees are more satisfied if their jobs have variety and offered them opportunities in the decision making process. Job ambiguity was found to have a negative affect on job satisfaction.

Knoop (1995) investigated the relationship among job involvement, job satisfaction, and organisation commitment for nurses. One hundred seventy-one nurse educators and registered nurses employed by hospitals and three community colleges in south Ontario were surveyed. The researcher found that the degree of relationship between satisfaction and commitment was moderately high; between satisfaction and involvement was negligible; and between involvement and commitment was moderate.

Organisation commitment also was found to be a predictor of job satisfaction in another study (Burrows, Munday, Tunnell, & Seay, 1996). This study was conducted with a sample of 172 high school teachers in North Central Texas. The study found that the job satisfaction level was associated positively with organisational inflexibility and intrinsic rewards, and negatively with the spatial distance between the principal and teachers

Wu and Short (1996) conducted a study in one of the northern states in United States. They surveyed (1114) public schools' teachers regarding their perception of empowerment, job satisfaction, and commitment. The results indicated that teachers' perceptions of their level of empowerment within the school organisation are significantly related to their job satisfaction. In fact, the study revealed that self-efficacy and professional growth were significant predictors of job satisfaction.

The above finding offers support to Rinehart and Short's (1994) study. They found that the correlation coefficient between job satisfaction and participant empowerment was .73. They reported that teachers who have more decision-making responsibilities in their job were also the most satisfied teachers.

#### **3.4.4 Job Satisfaction Factors: Summary and Conclusion**

Throughout Section 3.4, the researcher has examined the various factors which many theorists and empirical researchers have found to be associated, to at least some extent, with levels of job satisfaction. Individual theorists and researchers have tended to concentrate on identifying a few particularly significant job satisfaction factors. Their conclusions have varied widely, depending on the specific work settings that they have examined, on the one hand, and their respective theoretical assumptions, on the other. The general lack of agreement relating to which factors are most significant, particularly in terms of the conclusions of different empirical studies, made it difficult for the researcher of this study to know which factors to concentrate on, particularly as his empirical research project concerned a work setting somewhat different from those previously included in research. Taken collectively, however, the existing literature presents a broad composite range of factors that have received what the researcher considers to be enough support from theorists and from the results of empirical research to be worthy of inclusion in his study. These factors can be identified and classified as follows:

- 1) Personal Factors-- including, among other possible factors, age and experience, gender, level of education, and personality traits; and

2) Job-Related Factors-- which can be further sub-divided into two groups

- a) Intrinsic Factors, related to the nature of the work itself, such as opportunities for using skills and abilities, opportunities for learning new things, creativity, task variety, task difficulty, amount of work, responsibility, performance pressure and autonomy
- b) Extrinsic Factors, related to the work context or work environment, such as pay, working condition, supervision, work group, recognition, promotion and organisation characteristics and policy

### **3.5 The Significance of Job Satisfaction Levels**

The significance of low and high job satisfaction levels is a subject that has attracted considerable attention from researchers. As has been previously stated, it is generally assumed that job satisfaction is a key factor with respect to improving worker performance. In other words, it is generally assumed that workers who are happy with their jobs, and who can see that they stand to benefit from high performance, will tend to perform better than those who are unhappy with their jobs, or who can see no benefit from increased performance. Moreover, it is generally assumed that low levels of job satisfaction, in addition to negatively affecting job performance, can give rise to significant problems such as high levels of absenteeism and staff turnover. Many researchers have tried to evaluate the actual impact of the degree of job satisfaction on such behaviour. The relationship between different levels of job satisfaction and any of the projected outcomes may not be as clear-cut as many people think (Hodgetts, 1991).

Do satisfied workers really produce more and work harder than dissatisfied ones? In fact, there is no strong consensus in the literature about this issue. Some researchers

support the conventional assumption that high job satisfaction levels have a direct impact upon performance while others argue against the idea that a direct relationship between high job satisfaction and high performance can be clearly established. Many theorists argue that, although high satisfaction levels may not positively contribute to job performance, low job satisfaction levels do have an effect on productivity. Some view this as a direct relationship, while others frame it in terms of an indirect relationship arising out of problems such as absenteeism and staff turnover.

This section will present a brief review of literature concerning the consequences of job satisfaction levels. The section is divided into three sub-sections. Section 3.5.1 will consider the relationship between different job satisfaction levels and job performance. Section 3.5.2 will look at the relationship between low satisfaction levels and specific problems such as absenteeism and staff turnover. Finally, Section 3.5.3 will present a summary and conclusion concerning the significance of job satisfaction levels.

### **3.5.1 Job Satisfaction Levels and Performance**

Perhaps the key to understanding this issue is to understand the relationship between job satisfaction and motivation that the researcher previously considered in Section 3.2. As the researcher indicated in Section 3.2, motivation can be defined in two senses. The first relates to the worker's level of willingness to work to achieve goals. This is not necessarily particularly strongly related to his level of job satisfaction. Some workers will be highly motivated to perform even if they are not particularly satisfied, and others will not be particularly highly motivated even if they are satisfied. The second relates to the actual needs and values (i.e., motivations) that the worker is attempting to satisfy in the context of the job. This is directly related to satisfaction in the sense that the worker

will probably be satisfied with his work to the extent that it gives him opportunities to fulfil his motivations.

As the researcher will demonstrate below, most theorists and empirical researchers seem inclined to take the view that performance levels are more directly related to a worker's level of motivation, in the sense of his willingness to work to the best of his ability to attain goals, than they are to his level of job satisfaction, which merely describes his attitude about his job. However, motivation, defined in the second sense is also important. This relates not so much to a worker's basic, or existing, level of satisfaction as to **anticipated** satisfaction. The anticipation of satisfaction (i.e., from the fulfilment of a motivating value) may have a strong influence on a worker's motivation, in the sense of his willingness to work to the best of his ability. Of course it should be recognised that the attainment of anticipated satisfaction may contribute to a worker's expectations that his anticipated satisfaction of other desires will also be fulfilled. In this sense, an indirect relationship can be established between job satisfaction and performance. The relationship is roughly cyclical:

Anticipated satisfaction yields high performance, which may, in turn, yield actual satisfaction. Actual satisfaction may contribute to further anticipated satisfaction, yielding continued high performance, etc.

To cite some examples from the theoretical literature:

Vroom (1964) argued that satisfaction is related to the attainment of expected desired rewards (such as higher wages, promotions, being praised by co-workers, etc.) He



observed that such rewards may result from performing well, but he did not feel that there was necessarily a direct or reciprocal relationship between high performance and satisfaction. First, high performance does not always yield high satisfaction because high performance does not always lead to the attainment of the desired rewards. Second, satisfaction is not directly related to performance. A worker is, perhaps, more likely to perform well when he anticipates satisfaction from a reward than when he actually achieves it. If high performance is to be maintained, a satisfied worker must be given new rewards to aim for. Furthermore, if high satisfaction is to be maintained, the rewards must be attainable.

Vroom's conclusions have been supported by many scholars. Lawler (1973) also observed that performance leads to satisfaction only if performance will lead the worker to desired and fair rewards. Locke (1976) suggested that high productivity leads to high satisfaction under two conditions: first, if performance leads to a desired or valued outcome such as promotion; and second; when high productivity does not negatively affect the worker's personal life or health. Huczynski and Buchanan (1991) had a similar orientation to that of Vroom, and stated that the satisfaction level increases by rewards, which may result from high performance. Torrington and Hall (1991) thought that rewards which work as motivators may lead to satisfaction after a good performance. However, motivating workers to satisfy them does not guarantee high performance because there are other factors that may intervene such as lack of skills. Ford (1992) argued that job satisfaction may exist as a result of motivational programmes but observed that performance may still fall below the required standard due to a lack of suitable skills or biological incapability, etc. Miner (1992) argued that doing well at work can make people happy and doing badly can have the inverse effect.

Conversely, satisfied workers may be more productive if they are free of stress, whereas dissatisfied workers will express their displeasure by being less productive. So, satisfaction may lead to good performance which in turn adds to further feelings of satisfaction.

Other theorists have considered the possible effect of low satisfaction on job performance. Korman (1971) mentioned that as dissatisfaction and frustration may cause absence from work, logically this will affect the overall performance. He argued that the relationship between job satisfaction and performance is a matter of the workers' differences in their own self-perceived competency at the job, and the difference between workers in their norms of social and work groups. Locke (1984) pointed out that dissatisfaction may indirectly affect productivity in a negative manner. He gave the example of when workers strike, or when a competent employee resigns. Absenteeism (which is found to be related to dissatisfaction) was thought by Carrell and Kuzmits (1986) to affect overall profit and productivity.

To cite some empirical studies:

Lawler and Porter (1967) conducted empirical research in five organisations focusing on 148 middle and lower level managers. They found a strong relationship between job satisfaction and performance. They suggested that rewards are a third variable, which explains this correlation, and they argued that intrinsic rewards, such as advancement, are more efficient than extrinsic rewards such as pay. Thus if performance leads to desired rewards, satisfaction will be experienced from the work. This satisfaction may

contribute to further high performance, provided that the organisation gives workers new attainable rewards to aim for.

By contrast, Katzell, Thompson, and Guzzo (1992) conducted an empirical study in four organisations among 1200 employees. They found that there was no direct influence of job satisfaction on performance, nor performance on job satisfaction, despite the indirect influence that stems from high performance which leads firstly, to rewards, then to satisfaction.

### **3.5.2 Low Job Satisfaction Levels and Related Problems**

#### ***1) Absenteeism***

Absenteeism from work is one problem that many theorists and researchers have considered to be a possible consequence of job satisfaction. Obviously, there must be a distinction between an acceptable and excusable absence from work (for example as the result of illness or an accident) and an absence that has no valid excuse, which is sometimes called 'voluntary absenteeism'. It is this latter kind of absenteeism which could be a product of a low job satisfaction level. However, researchers are divided about the extent of the relationship between low job satisfaction and voluntary absenteeism. Although most allow that low satisfaction could be a contributing factor, they identify other factors as being equally, or even more, significant.

Vroom (1964) found a weak negative and consistent relationship between job satisfaction and absenteeism. He stated that an employee's decision to be present for, or absent from, work is likely to be strongly related to the perceived rewards or outcomes that he receives from the job. However, he further noted that workers with low

satisfaction levels do not always or frequently respond by skipping work altogether. Other factors, such as personal circumstances must be taken into consideration.

Locke (1976) also concluded that the relationship between satisfaction and absenteeism is fairly weak. He accounted for this by observing that employees do not react solely on the basis of their feelings. Need values must be balanced with preference values. If jobs are not readily available, most workers will presumably not be inclined to risk their employment by frequent absences even if they are not particularly satisfied with aspects of their work.

A review of twenty-nine studies conducted by Nicholson (et. al.) in 1976, concluded that the validity of the assumption that satisfaction influences absenteeism is doubtful.

Steers and Rhodes (1978), by contrast, suggested a model of attendance in which job satisfaction plays a vital role. They stated that several major categories of factor have an impact on attendance behaviour, but observed that satisfied workers tend to have a strong desire to attend work, whereas dissatisfied workers do not want to attend.

Carroll and Kuzmits (1986) also suggested a fairly strong relationship between low levels of job satisfaction and voluntary absenteeism. They concluded that an employee's decision on whether or not to attend work is affected by several factors such as the job being too boring or stressful, whether he or she dislikes co-workers or the supervisor, or whether he or she receives sufficient rewards for attendance.

However, a great many researchers, while acknowledging that job dissatisfaction may be significant with respect to absenteeism, have concluded that it is not the only factor to blame. Huczynski and Fitzpatrick (1989) believed that lack of satisfaction only contributes to absenteeism, rather than being the primary cause of it. They point out that although job satisfaction is an important factor, it is a general concept. It embraces sub-factors, which may influence absenteeism such as supervision, working environment, and work group relations. Gilmer and Deci (1977) and Miner (1992) believed that satisfied workers are less likely to be absent or to quit their jobs. However, the relationship between job satisfaction and absenteeism could be moderated by factors such as the importance of work to the employee and the existence of good relationship with superior and peers (Mckenna, 1994). Other researchers, including Blum and Naylor (1968) and Argyle (1989), have pointed out the relationship between job satisfaction and absenteeism could be influenced by personal variables such as gender, and are not necessarily related to job characteristics, or even job satisfaction.

Despite the various perspectives of the forgoing authors regarding the relationship between job satisfaction and absenteeism, there is a point which seems to play a vital role in this matter, which is the degree of flexibility of the organisation in terms of the regulations that deal with work attendance. In other words, it might be logical to say that dissatisfied employees would report more absence than satisfied ones in a flexible organisation where there were no serious consequences for absence from work.

Furthermore, a low degree of job satisfaction has been found to be related to unfavourable effects or behaviours such as poor health and mental health, anxiety, depression, violence. Thus, job dissatisfaction contributes indirectly to absenteeism.

Gruneberg (1979) found a consistent but low relationship between job dissatisfaction and mental health. Satisfactory jobs lead to better mental health, so better satisfied employees live and enjoy better mental health (Kornhauser, 1965). Tiffin and McCormick (1965) listed a number of possible reactions to frustration. These included aggression, regression, fixation, resignation, negativism, repression and withdrawal from work. Kossen (1978) agreed that such reactions are a response to frustration, which is a low level of satisfaction. Miner (1992) noted that low levels of job satisfaction may cause unfavourable emotional symptoms such as tension headaches, emotional disorder, difficulty in sleeping and emotional breakdown. Muchinsky (1997) reviewed a number of studies to explore the relationship between job satisfaction and life satisfaction and concluded that job satisfaction is one aspect among others which contributes to life satisfaction. Conversely, job dissatisfaction can contribute significantly to life dissatisfaction, with great consequences for the individual.

While many researchers have looked at voluntary absenteeism as a phenomenon of individual employee behaviour, others (Korman 1971 and Argyle 1989) have related low job satisfaction (or low morale) to an increased level of collective absenteeism, particularly in the form of strikes. Striking may reflect in an overt manner the degree of employees' frustration and unsatisfied needs. Maier (1973) listed some of the symptoms of frustration, including excessive criticism of management, constant voicing of grievances and damage to equipment. Miner (1992) stated that emotional illness and theft, dishonest behaviour and union activity, reduced quality and quantity of output, and may all be considered as extreme reactions to dissatisfaction.

## ***2) Staff Turnover***

Turnover of employees is usually a great financial loss to an organisation, especially if the employees were trained and educated at the company's expense. Not only does the loss of a productive employee hurt an organisation, but recruiting a replacement requires selections and interviews which involve financial expenditure. Furthermore it may be necessary to expend resources to train the new employee. And, of course, after all of this trouble and expense, the new employee might not necessarily be as productive as the previous one.

Although there are many reasons for leaving a job, job satisfaction is often considered one of the central causes (Miner, 1992). Turnover has been found by many researchers to be related to low levels of job satisfaction. Lawler (1973) argued that dissatisfied workers are likely to leave their jobs, especially if there is a more attractive job available. Maier (1973) agrees about the major role of dissatisfaction in resignation rates. He also emphasises that the employment interviewer should be concerned with the degree of fit between the job and the candidate to lessen the rate of turnover. Blum and Naylor (1968) also argued that low levels of satisfaction tend to contribute to turnover, but observed that another main factor may be the availability of alternative jobs. Mobley (1982) argued that the foremost factors which contribute to staff turnover are essentially the same factors which are associated with the degree of job satisfaction. He identified, salary, supervision, relations with co-workers, and promotional opportunities as being particularly significant indicators. He argued that although the relationship between low satisfaction levels and turnover is not as strong as many assume, it is consistent.

The relationship between job satisfaction and staff turnover is often assessed empirically by measuring job satisfaction among employees, waiting for a set time (for example, one year) then comparing the score of the employees who left with the scores of the remaining employees. The researcher will now proceed to cite just a few of many empirical studies that he has read.

In 1991, Berg conducted a study to determine the factors that can be used to predict employees' intent to stay at commercial television stations. Employees from five commercial television stations (N=120) participated in the study. The instrument focused on employee turnover in three departments (News, Production, and Sales). The results indicated that equity was shown as a predictor of both job satisfaction and intent to stay. Also, job satisfaction was found to be a predictor of intent to stay. The study also concluded that intrinsic variables were the most associated with job satisfaction, but noted that extrinsic variables such as working conditions and supervision were also significant.

Omundson and Schroeder (1996) investigated the relationship between accountants' personalities and both their job satisfaction and turnover intent. A cluster sample of 979 certified public accountants in the San Antonio and El Paso areas in Texas was used in this study. The study indicated that occupational setting was not found to have a significant relationship with respect to either job satisfaction or turnover intent. Level of decision-making authority was found to be positively associated with job satisfaction and negatively associated with turnover intent. Turnover was found to correlate negatively with job satisfaction. The study found that ethnicity did not have a significant relationship with respect to either job satisfaction or turnover intent.



A number of recent studies have suggested that there is a significant relationship between job satisfaction and turnover rate. For example, Kiyak, Namazi, and Kahana (1997) found that job satisfaction was the third best predictor of intention to leave the job after age and the length of employment. This finding was supported by Hellman's study (1997) which found that every unit of decrease in job satisfaction reflects approximately a one-half standard deviation increase in intent to leave.

### **3.5.3 The Significance of Job Satisfaction: Summary and Conclusion**

The significance of low and high job satisfaction levels is a subject that has attracted considerable attention from researchers. While many people, including managers and organisational planners, generally assume that improving job satisfaction is a key factor with respect to improving worker performance, the existing literature suggests that the relationship between job satisfaction and performance may not be quite so direct or clear-cut. Moreover, it is generally assumed that low levels of job satisfaction, in addition to negatively affecting job performance, can give rise to significant problems such as high levels of absenteeism and staff turnover. This assumption receives stronger support in the literature, but many theorists trace these problems at least partly to other factors, or argue that the relationship, while valid, is overstated.

Most theorists and researchers seem inclined to take the view that there is either no direct relationship, or only a weak direct relationship, between high satisfaction and high performance. High performance seems to be much more strongly linked to high motivation. However, as the researcher observed earlier in the chapter, there is a

generally acknowledged, but somewhat complex, relationship between motivation and job satisfaction.

Motivation can be defined in two senses: 1) as the willingness of a worker to expend effort to achieve his goals; and 2) as the goals or values that contribute to such a willingness. High motivation, defined in the first sense, is not necessarily strongly related to job satisfaction, but is generally held to be strongly related to job performance. However, motivation, in the second sense, which is more directly related to job satisfaction, is important as a means of producing a high level of motivation in the sense of a willingness to work to the best of one's ability.

In essence, a worker will be prepared to work hard and to perform as well as possible (i.e., be motivated) if his job presents him with the possibility of fulfilling his needs and values (i.e., his motivations). The anticipated satisfaction of desired rewards produces a high level of willingness to work. If the worker's desires are actually satisfied, this will produce job satisfaction, which may contribute to an expectation that other desires will be similarly satisfied, and thus contribute to worker motivation. As long as the job offers new rewards in terms of the worker's needs and values, motivation and high performance can be sustained. However, a high level of satisfaction can only be maintained if the rewards are actually achieved. A sustained failure to receive expected outcomes will not only reduce the job satisfaction level, but is also likely to reduce the level of a worker's motivation and performance.

In addition to a possible effect on performance, low levels of job satisfaction have been found to be linked, to at least some extent, to problems such as voluntary absenteeism and staff turnover, which have an indirect, but serious impact on production.

The direct relationship between absenteeism and job dissatisfaction seems to be consistent, but relatively weak. Other factors, such as personal characteristics and circumstances, also contribute to absenteeism. Furthermore, the level of absenteeism is likely to depend on the worker's perception of the consequences. If the organisation punishes absenteeism, and/or if the worker cannot afford to risk his job, the level of absenteeism is likely to be low even if the level of job satisfaction is not particularly good. Job dissatisfaction is also related to absenteeism indirectly, as it can contribute to unfavourable emotional symptoms such as tension headaches, emotional disorder, difficulty in sleeping and emotional breakdown, all of which are underlying causes of absenteeism.

There seems to be a stronger direct relationship between job dissatisfaction and staff turnover. However, this relationship is obviously dependent to at least some extent on the availability and desirability of other jobs.

### **3.6 Conclusion**

The main purpose of this chapter was to examine the nature, the underlying causes and the consequences of job satisfaction by presenting a literature review including: 1) some of the more influential theories of job satisfaction; and 2) significant empirical studies conducted by other researchers to determine the most significant job satisfaction factors in different work settings.

Section 3.2 looked at the existing definitions of job satisfaction presented by different theorists. The section presented a brief survey of some of the more significant definitional issues, including: the level of definitional complexity; the focus on worker attitudes or on the fit between worker attitudes and organisational attitudes; and the importance and nature of the distinction between job satisfaction and job dissatisfaction. The section proceeded to examine in detail the importance of distinguishing job satisfaction from related concepts such as motivation and morale.

With respect to the definitional issues, the researcher indicated that he prefers to define job satisfaction in fairly general terms as the attitude that a worker has about his job. He would agree that this attitude is strongly linked to causal factors but would argue that it is difficult to incorporate specific factors into one's definition because individual workers' circumstances, needs and values vary. The researcher agreed with the theorists who associated job satisfaction with the presence or absence of a good fit between the worker's goals and attitudes and the goals and attitudes of the employing organisation. The researcher noted that he did not see the need for a clear terminological distinction between job satisfaction and job dissatisfaction. He prefers to view the term job satisfaction as describing a range of attitudes that includes both positive attitudes and negative attitudes towards work. Consequently, when the researcher uses the term job dissatisfaction in the context of this study, he means simply a low level of job satisfaction, not a state that is the opposite of job satisfaction.

With respect to distinguishing motivation from job satisfaction, the researcher argued that motivation, when defined in terms of the needs and values that cause individual

workers to do their jobs, is a crucial concept for understanding workers' behaviour and attitudes. Job satisfaction, by contrast, is the concept that describes the attitude that workers have based on their ability to fulfil their motivations through their jobs. Since an understanding of the former is a necessary key to understanding and promoting the latter, it is natural that theory of motivation and theory of job satisfaction are closely related topics. With respect to the distinction between job satisfaction and morale, the researcher observed there is no clear consensus, but indicated that he will adopt the useful conceptualisation employed by many theorists that morale is a term which should be applied to group attitudes, while the term job satisfaction should be used to describe the attitudes of individual workers.

In Section 3.3 some of the more influential and significant theories of job satisfaction were presented in some detail. These included: Maslow's Needs Hierarchy Theory; Herzbergs' Two Factor Theory; Vroom's Expectancy Theory; Adams' Equity Theory; Lawler's Comparison Model; and Locke's Value Theory.

From these, and the other theories presented in the section, the researcher drew the following general conclusions about job satisfaction:

1. Employees seek to fulfil their needs as individual human beings by a number of different means. For many, jobs are either a necessary, or a popular and attractive, way of fulfilling these needs.
2. The level of a worker's job satisfaction is largely determined by various factors which are related to: 1) his individual circumstances, needs, values and preferences; 2) the nature of his work itself; and 3) his work environment and the degree of fit between

his motivations and goals and the employing organisation's motivations, goals, and policies.

3. There are differences between individual employees in terms of the amounts and kinds of outcomes or needs they seek to fulfil. One employee might place a primary value on pay, while another would be more concerned with increased recognition, and so on.
4. Employees' expectations of, and aspirations concerning, their outcomes play a significant role in determining their level of job satisfaction. If employees receive outcomes that are in line with their expectations, a good level of job satisfaction will result.
5. The level of an individual worker's satisfaction is also shaped by a comparison process that involves his perceptions concerning: 1) his own job inputs, in terms of education and training, experience, amount of work, job performance, etc.; 2) the inputs of other employees in similar positions; 3) his outcomes, in terms of the standards of pay and other rewards; and 4) the outcomes of other employees in similar positions. The greater the level of perceived equity, or fairness, in relation to all employees' inputs and outcomes, the higher the level of job satisfaction is likely to be.

In Section 3.4, the researcher drew together a significant number of theories and empirical studies about job satisfaction to explore the factors associated with high and low levels of job satisfaction. The general lack of agreement among theorists and researchers relating to which factors are most significant, particularly in terms of the conclusions of different empirical studies, made it difficult for the researcher to know which factors to concentrate on. This difficulty was greater still because his empirical

research project concerned a work setting somewhat different from those previously included in research. However, the researcher observed that, taken collectively, the existing literature presents a broad composite list of potential factors worthy of inclusion in his study. He identified and classified these as follows:

1. Personal Factors-- including, among other possible factors, age and experience, gender, level of education, and personality traits; and
2. Job-Related Factors-- which can be further sub-divided into two groups
  - a) Intrinsic Factors, related to the nature of the work itself, such as opportunities for using skills and abilities, opportunities for learning new things, creativity, task variety, task difficulty, amount of work, responsibility, performance pressure and autonomy
  - b) Extrinsic Factors, related to the work context or work environment, such as pay, working condition, supervision, work group, recognition, promotion and organisation characteristics and policy

Finally, in Section 3.5, the researcher considered the conclusions of many theorists and researchers concerning the potential consequences of high and low job satisfaction levels. The researcher examined the relationship between job satisfaction and job performance, and also looked at the relationship between low levels of job satisfaction and problems such as absenteeism and staff turnover.

The researcher observed that the consensus within the existing literature is that the relationship between job satisfaction and performance is not as clear-cut and direct as many people might assume. High job satisfaction and high performance do not seem to

be directly related. However, there does seem to be a direct relationship between high motivation and high performance. As motivation and job satisfaction are related, there is a concurrent, indirect relationship between job satisfaction and job performance. The anticipated satisfaction of desired rewards produces high motivation. If the worker's desires are actually satisfied, this will produce job satisfaction, which may contribute to an expectation that other desires will be similarly satisfied, and thus contribute to worker motivation. As long as the job offers new rewards in terms of the worker's needs and values, motivation and high performance can be sustained. However, a high level of satisfaction can only be maintained if the rewards are actually achieved. A sustained failure to receive expected outcomes will not only reduce the job satisfaction level, but is also likely to reduce the level of a worker's motivation and performance.

The researcher found more support in the literature for the idea that low levels of job satisfaction contribute to problems such as absenteeism and staff turnover. The direct relationship between absenteeism and job dissatisfaction seems to be consistent, but relatively weak. Other factors, such as personal characteristics and circumstances, also contribute to absenteeism. Furthermore, the level of absenteeism is likely to depend on the worker's perception of the consequences. If the organisation punishes absenteeism, and/or if the worker cannot afford to risk his job, the level of absenteeism is likely to be low even if the level of job satisfaction is not particularly good. Job dissatisfaction is also related to absenteeism indirectly, as it can contribute to unfavourable emotional symptoms such as tension headaches, emotional disorder, difficulty in sleeping and emotional breakdown, all of which are underlying causes of absenteeism. There seems to be a stronger direct relationship between job dissatisfaction and staff turnover.



However, this relationship is obviously dependent to at least some extent on the availability and desirability of other jobs.

## **Chapter Four:**

### **The Methodology of the Empirical Research Project**

#### **4.1 Introduction**

In the previous two chapters, the researcher has presented important background information concerning the Saudi economic offset programs and has reviewed an extensive body of existing literature about job satisfaction in order to develop an understanding of how it can be defined, its significance and the factors that have been found to relate strongly to it in various work settings. In this chapter, the researcher is concerned with describing how he brought his knowledge about the work context of the Saudi offset programs and his knowledge of the literature on job satisfaction together to design and conduct an empirical research project intended: 1) to measure the levels of worker satisfaction in three of the more developed offset companies; and 2) to identify the most significant causal factors related to these levels.

The organisation of the chapter is as follows. In Section 4.2, the researcher will look at the different methods used to measure job satisfaction and will explain his choice of the questionnaire method as the primary means for conducting the empirical research project. In Section 4.3, the researcher will provide details concerning the design and development of the unique research questionnaire used to conduct the study, and will describe the pilot study used to test the questionnaire. In Section 4.4, the researcher will describe the distribution of the questionnaire and provide an explanation of the difficulties encountered with respect to obtaining the responses. In Section 4.5, the researcher will comment on the techniques of statistical analysis applied to the data obtained from the responses to the questionnaire. And finally, In Section 4.6 the

researcher will explain how he conducted interviews with personnel working in the offset companies to supplement the data he obtained from the responses to the questionnaire.

## **4.2 Measuring Job Satisfaction**

This section has two aims: 1) to look briefly at the different techniques that are commonly used by researchers to measure job satisfaction; and 2) to explain the researcher's decision to employ the questionnaire method as the primary means for conducting his empirical research in the context of the Saudi economic offset companies. Section 4.2.1 will address the first aim, and Section 4.2.2 will address the second aim.

### **4.2.1 Common Techniques for Measuring Job Satisfaction**

The measurement of job satisfaction is an important topic that has received considerable attention from both theorists and empirical researchers. There is a general consensus that levels of job satisfaction are difficult to assess precisely since they are directly related to the complexity of individual human feelings and, hence, potentially subject to frequent and substantive change based on circumstances. Nevertheless, researchers have developed and employed a number of different techniques that can be used periodically to obtain a fairly reliable impression of either individual or collective job satisfaction levels in a given work setting at a given time. These techniques, which can be used separately or in combination with one another, include: interviews; group meetings; rating scales; critical incident assessments; and questionnaires (Riggio, 1990). In essence, all of these techniques are based on the assumption that the best way to

measure worker satisfaction is to question the workers directly about their attitudes. Other less direct techniques have been developed, but have not been widely used.

The different techniques all have their own particular strengths and weaknesses, and the technique or techniques that a given researcher chooses to employ will depend to a great extent on the work setting he is studying, his research priorities, etc. For example, a manager actually working in a particular job context may be concerned to monitor job satisfaction levels by giving workers regular chances to voice their grievances, provide input about how the work environment might be improved, etc. Such a manager might be in a particularly good position to assess worker attitudes in relation to critical incidents (for example, after the reorganisation of a work group or the promotion of a given employee, etc.) A researcher coming in from the outside, by contrast, or one who is more concerned to establish a general understanding of job satisfaction factors, might prefer to employ less “hands-on” techniques, such as questionnaires and rating scales. It has been suggested by many researchers that the key to good research lies not so much in choosing the right method, but rather in asking the right questions and choosing the method that is most useful for answering those questions in the context of a particular time and place.

Interviews and group meetings involve the direct questioning of employees by the researcher. They may be structured or unstructured, depending upon the researcher’s preferences and research aims. For example, the researcher might take care to always ask the same questions with each employee, or may allow an individual employee’s initial responses to shape follow-up questions. Furthermore, the researcher may allow

the subject to answer in an open-ended, or narrative, fashion, or may ask the subject to restrict his answers to a yes or no, or to a rating scale format. The interview approach often allows the researcher to obtain more detailed or specific information than other methods because it involves personal interaction between the researcher and the workers and, consequently, affords the possibility of follow-up questions on specific responses or points of interest (Riggio 1990).

The questionnaire method offers a more detached approach to assessing worker attitudes. One characteristic of the method is that it is always fairly structured. That is to say, this technique effectively guarantees that the questions will be the same for each employee included in a study. Answers may be less structured depending upon the questionnaire format. Some questionnaires encourage workers to answer in an open-ended fashion while others are closed (i.e., ask workers to restrict their answers to a specified range such as yes or no, or in accordance with a particular rating scale). A crucial advantage of the questionnaire approach is that it allows for a component of anonymity that may be necessary to obtain reliable responses from workers in some settings (Luthans 1989).

The rating scale instrument is one of the most frequently used and valuable techniques for measuring job satisfaction (Thierry and Koopman, 1984 and Kiely 1986). This technique, which is usually incorporated into other techniques, particularly questionnaires, involves restricting worker responses to a range of standard answers. Although open-ended responses can be valuable in the sense of providing more specific information, they can be difficult to quantify. For example, a particular worker may

indicate that he is generally satisfied with a given aspect of his work, and then proceed to define a number of specific criticisms that confuse the issue. When a large sample of such open-ended responses is collected, it can be difficult to establish a general impression of actual worker satisfaction levels. Rating scales provide data that is more easily quantifiable. Furthermore, they elicit responses that require less effort from the workers, which can be important, especially if a researcher wants to examine worker attitudes with respect to a great number of potential job satisfaction factors. If a questionnaire will take workers a great deal of time and effort to answer, they may be less likely to respond. Some rating scales have a simple range of two possible answers (i.e., satisfied or dissatisfied), while others have a range of three answers (i.e., satisfied, dissatisfied, or don't know). The most popular, and most precise, is the Likert rating scale, which has a five-answer range: very satisfied, satisfied, don't know, dissatisfied and very dissatisfied.

#### **4.2.2 The Choice of the Questionnaire Method for the Empirical Research Project**

The researcher selected the questionnaire method as the primary means for gathering data about job satisfaction levels for his empirical research project in the Saudi economic offset companies. Essentially, the researcher made this choice because he agreed, and still agrees, with the conclusions of a number of researchers, including Al-Nasr (1999), Bryman and Cramer (1994), and Luthans (1989), who all found the questionnaire method to be the best and most efficient way of measuring job satisfaction. These researchers observed that the use of the questionnaire as the main tool in such research has three important advantages over other methods such as interviews and group meetings:

- 1) it is relatively objective because all respondents answer exactly the same question;
- 2) respondents are more likely to answer honestly because they can remain anonymous;  
and
- 3) it makes it possible to gather and process a wide range of data from a large number of respondents easily and quickly.

The researcher would add that, since the questionnaire method has been very widely used, it should be possible to make substantive comparisons between this study and both future and previous studies of job satisfaction.

### **4.3 The Research Questionnaire: Development and Testing**

This section examines the development of the unique research questionnaire that was ultimately employed in the empirical research project, describes its content and explains the procedures that the researcher employed to test it. The section is organised as follows. Section 4.3.1 explains researcher's decision to develop a unique research questionnaire by examining the considerations that led the researcher to conclude that existing standardised surveys were inadequate for this particular study. Section 4.3.2 provides general comments on the design of the questionnaire. Section 4.3.3 looks at the questionnaire's objectives. Section 4.3.4 describes the content of the questionnaire. Finally, Section 4.3.5 details the pilot study that the researcher employed to test the questionnaire.

#### **4.3.1 The Need for a Unique Research Questionnaire**

The questionnaire method is one of the most widely used techniques for measuring job satisfaction, and, in order to promote a fairly reliable and consistent standard for the comparison of results obtained in different work settings, researchers have developed a number of standardised surveys. Some of the more popular standard questionnaires include: the Brayfield and Roth Index of Job Satisfaction; the Minnesota Satisfaction Questionnaire (MSQ); the Job Descriptive Index (JDI); and the Porter Need Satisfaction Questionnaire (NSQ). However, while the use of standard questionnaires has much to recommend it (Muchinsky 1997), it is generally recognised that it is not always possible to successfully implement a standardised questionnaire because the different objectives of different researchers and the specific characteristics and circumstances of different work settings often require a more specialised approach (Berry and Houston, 1993; Wanous and Lawler, 1972).

Taking into consideration both the objectives and the work setting of this study, the researcher felt that it would not be appropriate to employ one of the standard questionnaires. He concluded that it would be necessary to incorporate and adapt elements of existing questionnaires in order to create a unique research questionnaire.

##### ***1) Job Satisfaction Factors and the Number of Questions***

After looking at the more popular standard questionnaires, the researcher concluded that they are inadequate to fulfil the objectives he defined for the study in terms of including a sufficient number of potential job satisfaction factors and/or a sufficient number of questions to supply precise information concerning different aspects of these factors.



For example, the JDI only includes five job satisfaction factors: the nature of the work itself, supervision, pay, promotions and co-workers. As the researcher observed in the literature review, other factors such as personal factors, recognition and organisation characteristics and policies have been found by some researchers to be significant in some work settings. Since the researcher wishes to examine the importance of these potential job satisfaction factors, he would have to modify the JDI if he wished to use it to conduct his study.

The MSQ is regarded by many researchers to be one of the most reliable, valid and widely applicable instruments for measuring job satisfaction (Luthans 1989). The researcher agrees that it is probably the best standard questionnaire. It examines a greater number of potential job satisfaction factors than the JDI, and incorporates the Likert rating scale to provide a fairly precise measure of the level of worker satisfaction with respect to the different factors. However, it also has a limitation that concerned the researcher: it included only one question for each of the twenty facets of job satisfaction that it evaluates. For example, the questionnaire asks respondents to comment on their level of satisfaction about working conditions in general, but does not provide additional questions that would help the researcher to identify the specific working conditions that are causing worker dissatisfaction.

## ***2) Conducting Research in Saudi Arabia***

The work setting was another factor that caused the researcher to conclude that a new questionnaire would have to be developed for this study. Since most of the job

satisfaction theories and standard surveys were formulated and tested in the West, the researcher had to take into consideration the particular social, cultural and religious context of Saudi Arabia.

To conduct research in a conservative society such as that of Saudi Arabia requires some knowledge of that society's basic characteristics. The design of the research and the selection and formulation of questions must take into account the fact that every aspect of life in Saudi society is governed by rules and regulations deriving from Islamic law and Arab tradition. Furthermore, as well as paying attention to Islamic and Arab codes of conduct, researchers need to be familiar with some other aspects of Saudi culture.

Perhaps as a result of the protocols that Saudi society demands of its members, Saudis generally lack punctuality in keeping to schedules and appointments. Therefore, researchers should be prepared for the fact that everything takes a little longer than it probably would in a Western setting. Furthermore, establishing personal relationships and trust between the researcher and the research participants is one of the most important requirements for conducting research in Saudi Arabia. Saudis generally mask their feelings and attitudes, but this reticence can be decreased if trust and a personal relationship have been properly established. This may take time, but once a Saudi's trust has been won, he will be helpful in providing the researcher with substantial information. As one might expect, applying the relatively impersonal questionnaire method in such a setting can pose problems. In fact, as the researcher will explain in Section 4.4, this consideration did have a substantial effect on the responses even

though the researcher employed every possible means to reassure the workers about the aims of the study.

#### **4.3.2 General Comments on the Design of the Questionnaire**

Taking into account the considerations outlined in the last section, the researcher compiled material from existing studies and surveys of job satisfaction and adapted it in order to develop a unique questionnaire specifically fitted to the requirements of his objectives and of work settings in the Saudi Arabian context.\* With respect to the latter, it should be observed as a matter of course that, because the native language of the respondents was not English, the questionnaire was translated into Arabic by the researcher.

All the questions included in the questionnaire were formulated as “closed” questions, that is questions restricted to a specified range of answers, because, as Oskamp (1977) concluded, closed questions have the advantage of being “easy to score and relatively objective”. Although, he recognised that open-ended questions “have the advantages of eliciting the full range, depth, and the complexity of the respondent’s own views, with minimal distortion, in his or her own words”, he added that “the chief disadvantages of open-ended questions are the difficulty and frequently the unreliability of scoring or coding them”. Hence, with respect to the questions about the employees’ personal

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\*With respect to the Saudi context, the researcher extracted material from three previous studies of job satisfaction carried out in the area: The first was ‘Factors in job satisfaction among trained health administration in the Saudi health care system’, Othman Said Al-Ameri, Degree Date 1995, University of Manchester. The second was ‘An analytical study of job satisfaction in the Saudi Arabian public sector’, Fahed A. Al- Rahaimi, Degree Date 1990, University of Liverpool. And the third was ‘The job satisfaction and work motivation, job satisfaction and work involvement’, Walied A. Taher, Degree Date 1989, University of Colorado at Denver, USA.

characteristics, the researcher indicated that the respondents should simply identify themselves as belonging to one of the categories presented in the questionnaire, rather than requiring a specific individual response. Furthermore, with respect to the questions concerning satisfaction either with the job overall or with specific job-related factors, the Likert scale of summated ratings previously alluded to in Section 4.2 was used. This rating scale was preferred by the researcher because it is the most popular technique, and because it offers up to five degrees of agreement-disagreement, while the Thurstone scale offers only two degrees, and other existing scales offer only three degrees. Consequently, the Likert scale permits greater variance and provides more precise information about an individual worker's attitudes. It is also possible using the Likert scale that several patterns of response to the various items can produce the same score. A Thurstone scale also allows for this, but the Likert scale is more efficient.

The questionnaire was designed to present clear, unambiguous questions in a way that would appear attractive to respondents and would help to alleviate any reluctance to reply. While ensuring that "all the facilities deemed to be necessary for successful analysis" (Youngman, 1982) were included, the researcher also considered it important that the questionnaire should not be too long.

#### **4.3.3 The Objectives of the Questionnaire**

As the researcher stated in the introductory chapter, the empirical research project was intended to fulfil two basic objectives: 1) to measure the job satisfaction levels of Saudi nationals working in the Saudi economic offset companies; and 2) to identify the most significant factors that contribute to these levels. The research questionnaire was

designed to help the researcher meet these objectives by enabling him to collect data about the characteristics and attitudes of the workers, particularly as these relate to the list of potential job satisfaction factors the researcher identified as part of his review of the existing theoretical and empirical literature on job satisfaction.

The first objective for the questionnaire was simply to measure the individual employee's overall level of job satisfaction using the Likert scale. Obviously, this measure serves as an important baseline both for general observations and conclusions and for establishing levels of correlation with respect to specific job satisfaction factors.

As the researcher observed in Chapter Three, other researchers have identified a possible correlation between personal characteristics such as age and gender and employee satisfaction. The researcher's second objective for the questionnaire, therefore, was to establish whether or not there is such a correlation in the case of Saudi offset company employees. Consequently, the researcher decided to collect data through the questionnaire about the personal characteristics that he felt, based on the literature review and his personal experience, might possibly have a potential impact on job satisfaction. These included: 1) age; 2) monthly income; 3) years of experience in current job; 4) years of experience in all jobs; 5) qualifications; 6) job title; and 7) marital status.

The researcher's final objective was to determine the extent to which there was any significant relationship between the job satisfaction of the offset company employees and the various work-related factors that different theorists and researchers have

associated with job satisfaction levels. These work-related factors include: 1) intrinsic factors, or considerations related to the nature of the work itself such as creativity, autonomy, task variety etc.; and 2) extrinsic factors which relate to the context of the work or the work environment, such as pay, promotion, supervision, etc. To satisfy this objective, the researcher incorporated a series of questions about these work-related factors into the questionnaire and required the respondents to express their level of satisfaction according to the Likert scale. For practical reasons (because many of the aspects of the intrinsic factors the researcher wished to examine are very closely related) the intrinsic factors were viewed together as one job-related factor, the work itself, while the potentially significant extrinsic factors were examined separately. The total list of potential work-related factors examined therefore consisted of: 1) the work itself; 2) pay; 3) benefits; 4) recognition; 5) supervision; 6) promotion; 7) working conditions; 8) co-workers; 9) status; and 10) organisational policies.

#### **4.3.4 The Content of the Questionnaire**

The purpose of this section is to describe the content of the research questionnaire in some detail. The researcher would note at this point that he has included a copy of the questionnaire that was actually distributed to Saudi workers during the empirical research project, along with the original English version thereof, in the Appendix of the dissertation, so that the reader may refer to it if he wishes.

The questionnaire was divided into two parts. The questions about personal characteristics were in Part One, while Part Two was composed of specific questions aimed to measure the worker's level of job satisfaction, both with respect to the

individual job-related factors, and overall. Part Two was, therefore, sub-divided into 11 sections. Each of the first ten sections were concerned with the different aspects of the ten work-related factors and the final section consisted of one question designed to measure the overall level of job satisfaction.

With respect to the personal characteristics addressed in Part One, the questionnaire established general categories for the answers. For age, the respondents were given four options, 18-25, 26-35, 36-45 and 46-55. For monthly income, the respondents were asked to specify in terms of a range from less than 3000SR to more than 15000SR. With respect to experience in the current job they were asked to specify in terms of a range between 1 and 15 years. For experience in all kinds of jobs the range was defined from 1 year to more than 15 years. For level of education or qualifications the respondents were asked to indicate elementary school, secondary school, high school, diploma, university degree and high degree (PhDs or MAs). Specified job titles included supervisor, manager, engineer, technician, clerk and security. Finally, for marital status the respondents were asked to indicate whether they are married or single.

As noted above, Part Two of the questionnaire was designed to measure the individual worker's level of job satisfaction in terms of the Likert rating scale. The first ten sections of Part Two were concerned with the specific potential job satisfaction factors the researcher wished to examine: 1) the work itself; 2) pay; 3) job benefits; 4) recognition; 5) supervision; 6) promotion; 7) working conditions; 8) co-workers; 9) status, and 10) organisation policies. Each of these ten sections contained a number of items intended to measure not only the overall level of satisfaction with the factor but

also different specific aspects of it that the researcher felt might be important. Alongside each item were the five Likert scale multiple choices: “very dissatisfied”, coded 1; “dissatisfied”, coded 2; “don’t know”, coded 3; “satisfied”, coded 4; and “very satisfied”, coded 5. The respondent was asked to tick the box that best indicated his feeling regarding that item. The last question in each section of part two aimed to measure the overall level of satisfaction with the factor addressed in the section. The eleventh section of Part Two contained one question designed to measure the respondent’s overall level of job satisfaction, irrespective of specific factors.

When the researcher was formulating the questions for this part of the questionnaire, he tried to account for the fact that sometimes, when people are faced with a sensitive question, they say what they think they ought to say, or they say something that they think the questioner wants to hear, or they say something that they think will help them in some way. The researcher tried to put himself into the respondents’ shoes and tried to think of all things that would go through their minds as they answered the questionnaire-- or in some cases why they might refuse to answer certain questions.

The first section of Part Two, which aimed to measure the level of satisfaction with the work itself was quite large, containing seventeen items. Each item focused on one aspect of the potential intrinsic factors that might affect the worker’s level of job satisfaction. The last question in this part of the questionnaire aimed to measure the overall level of satisfaction with the work itself.



The second section concerned pay, and was devoted to finding out the importance of pay in shaping job satisfaction. It included four questions. Each of the first three items was concerned with possible ways in which an employee might judge his pay. The final question in the section concerned the overall level of satisfaction with pay.

The third section, which aimed to measure the level of satisfaction with job benefits, contained nine items. The particular benefits examined in this section of the questionnaire were: pensions; medical care; job security; holidays; catering; leisure activities; and free time. The final item measured the overall level of satisfaction with job benefits.

The fourth section, which aimed to measure the level of job satisfaction with recognition, contained seven questions. The first six questions were intended to assess, respectively, the employee's levels of satisfaction about the ways in which he received, or failed to receive, recognition from: the top management; from the department he works in; and from his co-workers. The last question aimed to find out the overall level of satisfaction with respect to recognition.

The fifth section concentrated on aspects of supervision in the workplace. The section contained eight items and respondents were asked to indicate their level of satisfaction regarding each aspect. The particular aspects that were addressed included: the level of understanding between supervisors and workers; the quality of personal relationships between supervisors and workers; the competence and flexibility of supervisors; the helpfulness of supervisors with respect to solving problems in the work place; and the

way that supervisors provide training for their employees. The last item measured the overall level of satisfaction with supervision.

The sixth section was devoted to finding out the level of satisfaction with respect to promotions. The section investigated the level of satisfaction with the promotion system from different angles. These angles were: feelings about advancement; opportunities for advancement to higher positions; opportunities for getting ahead in the job; and attitudes about the way promotions are assigned. The final question in this section asked about the overall level of satisfaction with promotion.

The seventh section, which was devoted to finding out the role of various working conditions in determining the level of job satisfaction, contained five items. The first four concerned attitudes about: buildings; equipment; working hours; and physical conditions. The final question asked the worker to describe his overall attitude about working conditions.

The eighth section aimed to measure the level of job satisfaction with co-workers, and contained three items. The questions took the form of statements describing the work group. The respondents were asked to state their level of satisfaction regarding each characteristic. The final question was devoted to measuring the overall level of satisfaction with co-workers.

The ninth section involved the degree of satisfaction with status, and included five questions. Each of the first four items was concerned with the possible ways by which

an employee could judge his status and the final question in the section asked about the worker's overall satisfaction with status.

The tenth section aimed to find out the extent to which the employee considers his employing organisation as a source of satisfaction or dissatisfaction. The section contained eight items. The first seven were designed to gain information about some specific characteristics or policies that could affect the employee's attitude towards his organisation, and the final question was devoted to measuring the overall level of satisfaction with the organisation.

The final section of Part Two contained only one question, which was: "All in all, to what extent are you satisfied with your job?" This was the final question in the questionnaire, which aimed to find out the overall level of job satisfaction among the offset company employees irrespective of any specific personal characteristics or work-related factors.

#### **4.3.5 The Pilot Study**

A pilot study is a commonly used procedure for testing a new questionnaire in its early stages before its final and official circulation. Essentially, it enables the researcher to: 1) examine the suitability of the sampling, the measurement techniques, etc.; 2) to remove ambiguities; and 3) to use the questionnaire confidently in subsequent studies.

The research questionnaire for this project took about three months to develop. It was then pilot-tested on some Saudi students pursuing postgraduate studies in different

fields at the University of Durham. When the researcher conducted the pilot study there were about twenty-five Saudi students in Durham, twenty-two of whom were studying for PhDs and three for MAs. (Five have since graduated and have now returned to Saudi Arabia.). The researcher considered these students to be suitable test subjects for the research questionnaire because they all had at least some experience working in Saudi Arabia prior to the beginning of their higher degree studies. Consequently, the researcher felt that they would be likely to respond to the questionnaire in a fashion similar enough to that of the offset company employees that it would help him to identify any obvious problems or ambiguities with respect to the questionnaire.

The researcher approached the pilot study subjects directly through a meeting of the Saudi Club in Durham. A copy of the questionnaire was handed out, and the researcher proceeded to explain to them the aim of the study and to clarify any points they had questions about. In total twenty copies of the questionnaire were distributed, and fifteen were returned.

The pilot study enabled the researcher to check the validity and measure the reliability of the questionnaire. The respondents recommended no major changes to the structure or content of the questionnaire, but did make some suggestions about the format and the specific phrasing of certain questions that the researcher was able to use to make the questionnaire better adapted to the Saudi culture and working environment.

## **4.4 The Research Questionnaire: Distribution and Responses**

The sample for the empirical research project consisted of Saudi nationals working in all job categories (i.e., supervisors, managers, engineers, technicians, clerks and security guards) for three of the more developed offset program companies, namely Advanced Electronics Company (AEC), Al Salam Aircraft Company (ASAC), and International Systems Engineering (ISE). These three companies were chosen by the researcher because they were formed in the first stages of the Saudi economic offset programs (more specifically, in the context of the Peace Shield I Offset Program). Consequently, they have already carried out large and significant contracts and projects, and have created many jobs for Saudi nationals.

This section looks at matters concerned with the distribution of, and the responses to, the research questionnaire. It is divided into three sub-sections. Section 4.4.1 describes the procedure the researcher used to distribute the questionnaire. Section 4.4.2 looks at the obstacles the researcher encountered with respect to obtaining valid responses to the questionnaire. And finally, Section 4.4.3 looks at the final level of response.

### **4.4.1 The Procedure of Distribution**

The researcher met the public relations managers in each of the three offset companies during a field study trip to Saudi Arabia in January 1998. He explained to them the purpose and objectives of the study, and sought their help in gaining the co-operation of company staff in answering the questionnaire. He found them to be supportive and enthusiastic, particularly since they agreed that the companies would benefit from the study after the analysis of its results.

The duration of the field trip was about three months, extending through January, February and March of 1998. The researcher spent most of his time with the companies' staff, explaining to them the aims of the questionnaire and answering their questions, as well as collecting the completed questionnaires, which were returned through the personnel departments of each company.

All the respondents were given seven working days in which to return the questionnaire, and during that period the researcher answered the queries they had about ambiguous points in the questionnaire, conducted interviews with some officials and employees, and collected written material concerning the offset companies.

#### **4.4.2 The Obstacles Encountered With Respect to the Responses**

One of the first obstacles with respect to obtaining valid responses to the questionnaire was that some employees of the offset companies misunderstood the purpose of the study and tried to interfere with its smooth progress by giving the top-level management a negative interpretation of the purpose of the study-- for example they indicated that the research might be intended to get information about employees in order to contact them and attract them to transfer to other companies. This was a significant matter because there is a very high level of competition between the different economic offset companies. Fortunately, the researcher was able to circumvent this obstacle to a very great extent by reassuring company officials about the aims of the research.

The researcher also had to overcome the reluctance of many employees who were unfamiliar with this sort of questionnaire, since it was the first one measuring their job satisfaction and finding out about their attitudes towards their employment. In addition to this general lack of experience with questionnaires, the researcher found that many employees were concerned about the sensitivity of the questions especially those regarding salary, the promotion system and supervision. As a general rule, most employees in Saudi Arabia, especially those who work in the private sector, are accustomed to hiding their honest opinions about their work. They are afraid that, if they express grievances, it might destroy their career prospects. On the whole, they tend to believe that their superiors will make no distinction between constructive and destructive criticism, but will punish all critical comments equally. The researcher made every possible effort to overcome this problem by explaining to the employees that this research would be in their interests and in the interests of the company as a whole. The researcher assured the employees that all the information taken from them would be used for the purpose of the research only. In addition to verbal reassurances, the cover letter indicated that names were not needed on questionnaires. The anonymity of response was intended to demonstrate to the workers that they would not suffer individual penalties as a result of their comments. Regrettably, even after all of these measures had been taken, some employees refused to answer the questionnaire and declared frankly that they regarded it as a manoeuvre or trick on the part of the researcher to trap them into disclosing their attitudes about their jobs.

#### **4.4.3 The Final Level of Response**

The researcher did his best to ensure that at least 65% of the questionnaires were returned, this return rate being the minimum that is typically considered reasonable for such studies (Youngman, 1979). The total number of questionnaires distributed was 450, and the final response was 302, representing about a 67% rate of return. This figure excludes five returned questionnaires, which were not adequately completed or were answered by respondents who clearly did not take the questionnaire seriously. These were not considered as acceptable replies and were not included in the results.

### **4.5 The Methodology of the Statistical Analysis**

#### **4.5.1 The Internal Consistency Test**

Obviously, in order to be worthwhile, the questionnaire had to be valid. That is, it had to measure what it was supposed to measure. Testing its validity involved ensuring, first, that it contained the totality of elements thought to be part of the concept that it is aimed to measure, and, second, that it showed a correspondence, or relationship, between the separate items of the questionnaire. In other words, the validity of the questionnaire depended on its success in measuring both the overall level of job satisfaction and the relative level of satisfaction produced by each contributory factor (Bryman and Cramer, 1994).

To ensure that the questionnaire used in this study achieved an acceptable degree of validity, it was subjected to a reliability analysis test, using Cronback's Alpha Model (Youngman and Eggleston, 1982). This model tests for internal consistency among the items of a questionnaire. In this instance, the method was based on the average



correlation of items within the questionnaire. The reliability coefficients of the questionnaire were found to be .9817 as a number of cases =302 while the number of items =73. This level of reliability is generally considered to be statistically acceptable in the analysis of such a questionnaire (Bynner and Stribley, 1986).

#### **4.5.2 The Statistical Analysis of the Questionnaire Data**

The final procedure relating to the research questionnaire was to code the questions and responses so as to enable the researcher to analyse the raw data.\* This was done at the Computer Centre in the College of Art at King Saud University, Saudi Arabia. All of the material was coded under the guidance of the people who work in the Computer Centre at the university, and all the questions and responses were assigned the necessary values and variables for the analysis techniques the researcher employed to help him achieve his objectives for the empirical research project.

The data obtained from the questionnaire responses was analysed by utilising the Statistical Package for Social Science (SPSS). The data from the first part of the questionnaire can be classified as “nominal” because the data obtained was used simply for the purpose of categorising the personal characteristics of individuals, not for representing a level of value (i.e., expressing an attitude about job satisfaction). The data from the second part of the questionnaire concerning job satisfaction levels were, by contrast, “ordinal” because the items were coded to represent the different rankings on the five-point Likert scale, indicating corresponding value ratings. Non-parametric

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\* Because the researcher's background is not strong in statistics, he consulted several people proficient in this field to assist him with the data analysis. These included: Dr A.H. Seheult, Dr F.P. Coolen and Mr D.A. Woof of the Department of Mathematics at the University of Durham; Karl J. Pedersen of the IT

statistics, which, as Clark (1991) and Gibbons (1993) suggest, are the most appropriate techniques for analysing both ordinal and nominal data, were used for the analysis of results.

The main technique used to analyse the results of the study was the **correlation coefficient**, a technique often used in attitude measurement (Oskamp, 1977). Because the major aim of the study was to find the strength of association between several independent factors and a dependent factor, a correlation coefficient test, more specifically, Spearman's Rho measure of association, was used. In this technique values of association between two variables range from -1 to 1. The closer the value is to 1 or -1 the stronger the association is between the variables. The value of absolute 1 or -1 indicates a perfect correlation between the variables, whereas the value of zero indicates no association between the two variables. Moreover the presence or absence of the minus sign indicates the direction of the association (i.e., a positive or negative correlation). The level of significance used in testing the correlations was .05 per cent, usually regarded as an acceptable level in social science (Oskamp, 1977).

The baseline for establishing the aggregate overall job satisfaction level for the offset companies was the data from all 302 responses to the final question in Part Two of the questionnaire (i.e., Question 80): "All in all, to what extent are you satisfied with your job?" This data, along with some considerations about its validity and some observations about how it relates to the aggregate data obtained from the responses to all of the different questions for the specific job satisfaction factors and to the data obtained

from the interviews, will be presented in the second section of Chapter Five: Data Presentation and Analysis.

For each of the potential job satisfaction factors included in the research questionnaire, the researcher generated a hypothesis and a null hypothesis, the former indicating that a significant association exists (at the .05 level) between the factor and the overall job satisfaction level, and the latter indicating that no significant association exists. The data for each factor was then subjected to a Spearman Correlation Coefficient Two-Tailed Test in order to determine the significance of the factor in relation to the overall level of job satisfaction.

For example, when looking at the data on age and overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H.1.1 There is a significant relationship between the respondent's age and the degree of job satisfaction.

H 0 1.1 There is no significant relationship between the respondent's age and the degree of job satisfaction.

A Spearman Correlation Coefficient Two-Tailed Test was then performed and the resulting significance was found to be .013, which is not significant at the .05 level. Consequently, the null hypothesis that there is no significant relationship between the respondent's age and the degree of overall job satisfaction was accepted. Obviously, if

the significance resulting from the test had been .05 or higher, the null hypothesis would have been rejected.

Chapter Five will present a comprehensive description and analysis of the questionnaire data, with full details concerning the values, frequencies and percentages of the responses to each question. The hypotheses and null hypotheses generated to describe the association between overall job satisfaction and each of the personal characteristics and work-related factors investigated, along with the results of the respective Spearman tests, will be presented in the third and fourth sections of the chapter.

#### **4.6 Interviews**

The researcher supplemented the quantitative data obtained through the questionnaire with qualitative material gained through interviews with officials and employees working in the offset companies. The main purpose of the interviews was to probe deeper into the attitudes of offset company employees towards the issues raised in the questionnaire. As the researcher has indicated previously, he conducted a number of interviews with officials and employees of the offset companies during his field research trip to Saudi Arabia in the period from January to March 1998. After analysing the data and writing up a first draft of the results, the researcher decided to conduct further interviews to gain a better understanding of specific areas suggested by the data analysis of the responses to the research questionnaire. Wherever possible, the material obtained from these interviews was incorporated into the relevant sections of Chapter Five. This section provides some general comments on conducting interviews in Saudi Arabia and

explains the basic procedure that the researcher employed with respect to conducting interviews for the empirical research project.

#### **4.6.1 Conducting Interviews in Saudi Arabia**

As was the case during the development and use of the research questionnaire, the researcher, when applying the interview method in his research, had to take account of the specific characteristics of, and obstacles posed by, the Saudi Arabian context.

Generally speaking, in Saudi Arabia, a researcher should not be surprised if his interviews with any given official take place with a number of other people in the room, for the long Saudi tradition of hospitality requires one to meet all visitors personally, even if this results in the cancellation or delay of a prearranged meeting. Furthermore, it is generally advisable when conversing with Saudis not to show impatience, preoccupation with other affairs, or undue haste. The Saudi will invariably engage in social talk and pleasantries with his guest for what may seem a long time. Thus patience is a very important quality in anyone conducting research in Saudi Arabia.

The usual Saudi reluctance to make critical comments about job-related issues applies even more heavily with respect to interviews than it did with respect to the questionnaire. Owing to the sensitivity of the subjects addressed, those who agreed to take part in interviews insisted that they did not want to be quoted and identified. However, because the researcher was able to gain the trust of some of the workers and to reassure them about the aims of the interviews, he was able to obtain much useful information from them about the matters they had been asked about in the

questionnaire. The interviews consequently contributed to the research data by providing a supplementary, and generally more detailed, perspective on some of the issues addressed in the quantitative research. Although, the researcher has not been able to systematically analyse the information gained from them in the way he has done with the data from the questionnaire, the study has been informed to a significant extent by these discussions.

#### **4.6.2 The Procedure for the Interviews**

The researcher arranged the interviews conducted for the empirical research project by contacting the directors of personnel and public relations in the three offset companies and asking them to assist him in finding employees who would be willing to comment in more detail about their attitudes concerning the job satisfaction factors included in the research questionnaire. As a result, the researcher was able to participate in a considerable number of meetings with both individual employees and groups of employees, including, in some cases, department heads and executives. In the course of these meetings, he was able to conduct interviews to probe into important job satisfaction issues in more detail and to ask follow-up questions to clarify ambiguous points raised by initial responses.

## **Chapter Five:**

### **Data Presentation and Analysis**

#### **5.1 Introduction**

The purpose of this chapter is to present both the data obtained from the responses to the research questionnaire, and the researcher's analysis thereof. Furthermore, and particularly with respect to specific areas of interest suggested by the results of the initial data analysis, the researcher has sought to incorporate, wherever possible, supplementary data that he obtained through interviews with employees working in the three Saudi offset companies that comprised the setting for the empirical research project.

As the researcher explained in the introductory chapter, his primary purpose for the study as a whole was to measure the level of job satisfaction in the Saudi offset companies and to identify the key factors associated with it. The empirical research project was conducted as the primary means of fulfilling this purpose. Consequently, the material presented in this chapter is effectively the most important element of the whole study.

As the researcher further explained in Chapter Four, the empirical research project had three objectives that corresponded with the primary purpose of the study. The first objective was to measure the overall level of job satisfaction in the three selected offset companies. The other two objectives involved assessing the relative significance, both collectively and individually, of the personal characteristics and work-related factors that the researcher identified as being potentially important in the course of his review of the existing literature on job satisfaction. More specifically, the second objective was to determine the extent to which the workers' personal characteristics contributed to the

overall level of satisfaction. And the third objective was to determine the extent to which intrinsic and extrinsic job-related factors contributed to the overall level of satisfaction.

The chapter is organised in such a way as to treat each of the three objectives in turn, and, in addition to this introductory section, has four more sections. Section 5.2 presents, and considers the validity and implications of, the results the researcher obtained from the final question in the questionnaire, which aimed to measure the individual respondent's overall level of job satisfaction. This data served as an important baseline, both for general observations and conclusions, and for establishing levels of correlation with respect to both the personal characteristics and the job-related factors. Section 5.3 presents the data on personal characteristics collected from Part One of the research questionnaire, along with the researcher's analysis thereof. Section 5.4 presents the data on satisfaction levels and the selected job-related factors collected from Part Two of the research questionnaire, along with the researcher's analysis thereof. Finally, Section 5.5 provides a summary of all of the material in Sections 5.2 to 5.4 and concludes the chapter.

## **5.2 Overall Job Satisfaction**

This section has three sub-sections. Section 5.2.1 presents the data obtained from the responses to the question measuring overall job satisfaction. Section 5.2.2 presents some considerations that should be kept in mind concerning the value of this data. And Section 5.2.3 comments briefly on the relationship between the baseline finding concerning overall job satisfaction and the data obtained from the responses to the other questions in the research questionnaire.



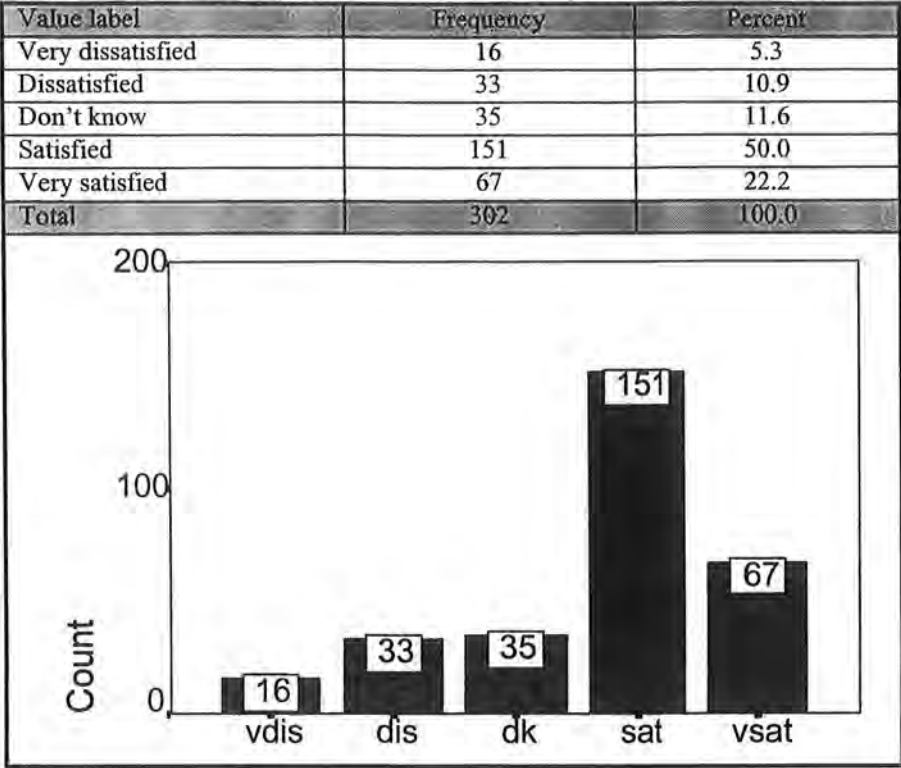
### **5.2.1 The Responses to the Question on Overall Job Satisfaction**

Although the data presented in this section was obtained from the workers' responses to Question 80, the last question in Part Two of the questionnaire, and the last question overall, this data actually represents the result most important with respect to the first objective of the empirical research project: that is, measuring the overall level of job satisfaction among employees working in the selected Saudi offset companies. Consequently, it is appropriate that this data should be presented and analysed first.

As the researcher explained in Chapter Four, the final question was stated as "All in all, to what extent are you satisfied with your job?" The respondents were asked to rate their response according to the five point Likert scale, indicating that they were: 1) very dissatisfied; 2) dissatisfied; 3) don't know; 4) satisfied; or 5) very satisfied. The data resulting from the responses to this question was utilised for hypothesis testing as a baseline indicator of the overall job satisfaction levels of the three offset companies' employees, irrespective of all of the specific personal characteristics and job-related factors that were also included in the questionnaire.

The responses to this question were as follows:

**Table and Chart 5.1: All in all, to what extent are you satisfied with your job?**



Generally, as one can see from the above table and chart, the responses reveal an overwhelming majority (better than 70 percent of the whole sample) of satisfied or very satisfied employees. Of the 302 respondents, 151 employees, or exactly 50 percent, reported being satisfied with their job. A further 67 employees (22.2 percent) were very satisfied. Furthermore, of the remaining 84 employees, 11.6 per cent were neutral in their answer. Consequently those who responded that they were dissatisfied overall constituted only 10.9 percent of the total and those who were very dissatisfied constituted only a further 5.3 percent of the total.

Before administering the questionnaire the researcher, and others that he had discussed the matter with, suspected that there was a low level of overall satisfaction among employees at the offset companies. However, the data from the responses to this question suggests the opposite. Furthermore, as the researcher shall show in the balance

of this chapter, a careful examination of the data obtained from the other questions is consistent with this conclusion.

### **5.2.2 Some Important Considerations Concerning Survey Data on Overall Job Satisfaction Levels**

As the researcher explained in Chapter Four, most techniques for measuring job satisfaction tend to rely on direct questioning of the workers, either through interviews or questionnaires. To a certain extent, researchers must make a leap of faith and trust that the answers they obtain through such techniques are valid and reliable. However, with respect to the validity of data obtained from direct questions concerning overall job satisfaction levels, the researcher would note at this point that there is a widespread recognition that one needs to proceed carefully. For example, he has observed that similar surveys of workers in the United States, the United Kingdom and Canada have also found that, despite apparent dissatisfaction, the vast majority of workers tend to say that they are fairly satisfied with their jobs (Organ & Lingl, 1995; Dekker, Barling & Kelloway, 1996; and Pool, 1997). One set of surveys that spanned a 20-year period revealed that satisfied workers comprised 80 to 90 per cent of the labour force in a given year (Quinn and Staines, 1979). Furnham (1992) stated that: "Surveys consistently indicate that 80–90 per cent of people are relatively happy at work."

Because there is a tendency for people to simply accept the status quo, the fact that the research questionnaire employed in this study found a high overall level of job satisfaction should not necessarily be understood to mean that most of the offset company employees are really particularly happy and satisfied in every respect, or that there is no need for improvements to the existing system. It is important to note that, even if some factors are satisfactory or even highly satisfactory, others may be deficient.

For instance, good supervisors, co-operative co-workers, and interesting work may compensate for low pay and poor conditions. On this issue, Vecchio (1991) commented: “The evidence of fairly high general job satisfaction should not be interpreted as indicating that working conditions (in factories, for example) are not in need of improvement. Such problems are overlooked when one examines aggregate data for the entire work force.”

With respect to the context of this study, one general factor, which involves the availability of alternative jobs, and a couple of specific cultural factors need to be taken into consideration when one is drawing conclusions based on the survey data about overall job satisfaction levels.

#### ***A) The Alternative Jobs Factor and the Context of the Study***

As the researcher indicated in Chapter Three, when he was considering other scholars conclusions about the significance of job satisfaction with respect to rates of absenteeism and staff turnover, some social scientists have suggested that dissatisfaction, or at least the expression of dissatisfaction, tends to be lower during periods of economic recession because there is a scarcity of jobs. Consequently, employees have little incentive to leave their jobs and they are less likely to jeopardise their current jobs through absenteeism, or through complaining about conditions that bother them. The opposite principle may apply during an economic boom.

Throughout the period when the data for this study was being collected, the Saudi economy was in a state of recession as a result of an extended decline in the price of oil. The significance, for the Saudi economy, of fluctuations in oil prices is difficult to overstate, as oil sales continue to constitute more than 70% of the government's revenue

(Al-Yamamah, 1998). It is probably worth noting that, at the end of 1999 and throughout the year 2000, prices began to rise again, and the Saudi economy may have been improving throughout this period as a result. However, as the questionnaire results were obtained in 1998, and as the subsequent interviews essentially only supplemented the questionnaire data, the recent upturn should have little or no effect on the results of the study. It can be assumed that the data reflects recessed economic conditions. That is to say, it may be the case that the workers were more reluctant to express overall dissatisfaction at the time of the survey than they would be if a similar survey were conducted at this time.

#### ***B) Specific Cultural Factors and the Context of the Study***

Saudi culture specifically, and Arab and Muslim culture generally, do have components which potentially raise questions about the validity of the data on overall job satisfaction that was collected in the course of this study. The researcher has already noted in Chapter Four that Saudi workers have a tendency to conceal their real feelings about their work for fear that their employers will fail to distinguish between constructive criticism and other types of complaint, and will, consequently, punish them for any critical remarks that they make. The researcher described the steps that he took to alleviate such concerns, with respect to both the questionnaire and the interviews, and he would argue that he achieved considerable success in this area. However, he cannot guarantee that attitudes of this sort did not affect the results to some extent.

More generally, with respect to the responses to Question 80, it could be suggested that, since all the respondents were Muslims, their expressions of satisfaction reflect not so much their actual attitudes, but rather their responses to a religious duty to thank Allah

(God) for his gifts whether one is happy or not, and to show patience in an unhappy situation based on the belief that it is a test from Allah.

It is a religious obligation for every individual Muslim to support himself and his family through whatever work is available. It is commonly held in Islam that the worker is more pleasing to Allah than the worshipper. In fact, the distinction between work and worship is not so clear-cut. For the Muslim, work is generally considered to be a crucial part of worship. The Prophet Mohammed (peace and blessing be upon him) motivated Muslims to join the workforce and to work hard and honestly. He said that: "Whoever is exhausted because of hard work has thereby caused his sins to be absolved." And on another occasion he said: "No one eats better food than that which he earns from his work."

Of course, far from expecting workers to endure undue hardship, Islam also provides a code of conduct for both higher ranking employees and employers to follow. A Muslim is expected to respect his co-workers in and out the workplace. There are many Islamic ethical injunctions, which have a bearing on the workplace. In Islam one is forbidden to gossip, to backbite, to accept bribes, to abuse work authority, to look down on people, to insult or humiliate them, or to hurt their feelings. These are only a few of the principles that all Muslims, regardless of occupational status, are expected adhere to in the workplace. Furthermore, Islam requires that respect must be shown by an employer to an employee in the form of full rights and the payment of a decent wage. As the Prophet Mohammed (peace and blessing be upon him) said, "Give an employee his due payment before his sweat dries." The relationship between the employer and the employee is very well defined and clear. All faithful Muslim employees should always bear in mind that they are responsible for their work and for doing it honestly, and that they will be

asked about it on the day of judgement. And likewise, Muslim employers should remember that they are responsible for treating their workers well, and that they will be judged on their conduct in this area.

However, the standards expressed above represent an ideal that all Muslims should strive to live according to, not, unfortunately, the reality that necessarily prevails in the workplace. It is certainly possible that employers and managers might fail to live up to the required standard, and it is possible that workers might fail to express discontent about this because they feel that they have a religious duty to endure such conditions patiently and without complaint. The researcher does not believe that many of the respondents concealed their feelings for religious reasons. The clear discontent that (as will be seen in the following sections) was expressed in some specific areas is an indication that many workers were prepared to express their true attitudes to a great extent. However, as was the case with the general Saudi reluctance to express attitudes about work, the researcher cannot guarantee that a similar reluctance derived from Islamic beliefs and principles did not play some role in shaping the questionnaire responses.

### **5.2.3 The Responses on Overall Satisfaction and the Other Questionnaire Responses**

The considerations outlined in Section 5.2.2 do not, of course, mean that the data from the responses to Question 80 should be disregarded. Rather, they simply mean that the researcher had to be careful not to base his final conclusions, either about overall job satisfaction or about the relative importance of the personal characteristics and the job-related factors, exclusively on this baseline data. As the researcher recognised this

limitation, he was able to strengthen his conclusions by carefully examining the aggregate data from the questionnaire responses.

With respect to the level of overall satisfaction, the researcher was able to check the validity of the overall job satisfaction finding by paying greater attention to the levels of satisfaction that were expressed by the workers with respect to the specific job-related satisfaction factors. The researcher would contend that workers are probably more likely to express a grievance when they are asked specifically about something that is bothering them than when they are asked a general question about their overall satisfaction. This is one reason that the researcher felt it was important to include as many potential satisfaction factors as possible in the research questionnaire. Looking at the responses to the separate job-related factors, the researcher was able to develop a cumulative impression that helped him to assess the value of the response to Question 80. If the workers had reported being dissatisfied with respect to a great many of the job related factors, it certainly would have raised some questions about the validity of the overwhelmingly favourable response to the question about overall satisfaction. However, as we shall see in Section 5.4, while significant levels of discontent were expressed in some areas, the majority of workers reported satisfaction for most of the job-related factors, and there were very high satisfaction percentages in a number of areas. Consequently, the researcher would argue that the aggregate data from the responses to the rest of Part Two of the research questionnaire supports the overall job satisfaction finding from Question 80 to a considerable extent.

The validity of the Question 80 data is also important with respect to the conclusions about the relative importance, both collectively and individually, of the personal characteristics and job-related factors that were included in the research questionnaire,



as the significance of each of these characteristics and factors was tested primarily in terms of this data. The researcher will explain the steps he took to strengthen his conclusions with respect to the significance of the personal characteristics and job-related factors in Sections 5.3 and 5.4 respectively.

### **5.3 Personal Characteristics and Job Satisfaction**

Part One of the questionnaire contained questions about employees' personal characteristics, namely their: age; monthly income; years in the current job; years in work overall; qualifications; job title; and marital status. The researcher's aim in this section is to present and analyse the data he obtained from the responses to this part of the research questionnaire.

As the researcher explained above, after determining the overall level of worker satisfaction in the Saudi offset companies, his second objective for the empirical research project was to determine whether or not the employees' personal characteristics, considered both collectively and individually, contributed significantly to their overall levels of job satisfaction. As the researcher explained in Chapter Four, in order to meet this objective, he subjected the data to statistical analysis using SPSS. The primary technique employed was the Spearman Correlation Coefficient Two-Tailed Test, which is designed to establish the precise significance of the relationship between two variables. In this case, the researcher was using it to test whether or not the data the workers provided about each of the personal characteristics was significant (in terms of the .05 level of significance that the researcher established as the parameter for the study) in relation to the overall levels of job satisfaction which they expressed in their answers to the overall satisfaction question (Question 80) in Part Two of the research questionnaire.

Bearing in mind the considerations presented in the last section, the researcher did not rely exclusively on the Spearman test when analysing the data. Where it seemed appropriate, he also conducted a number of crosstabulations with other data (i.e., the satisfaction levels expressed with respect to specific job-related factors) in order to gain a more comprehensive and detailed understanding of the potential implications of the data concerning personal characteristics.

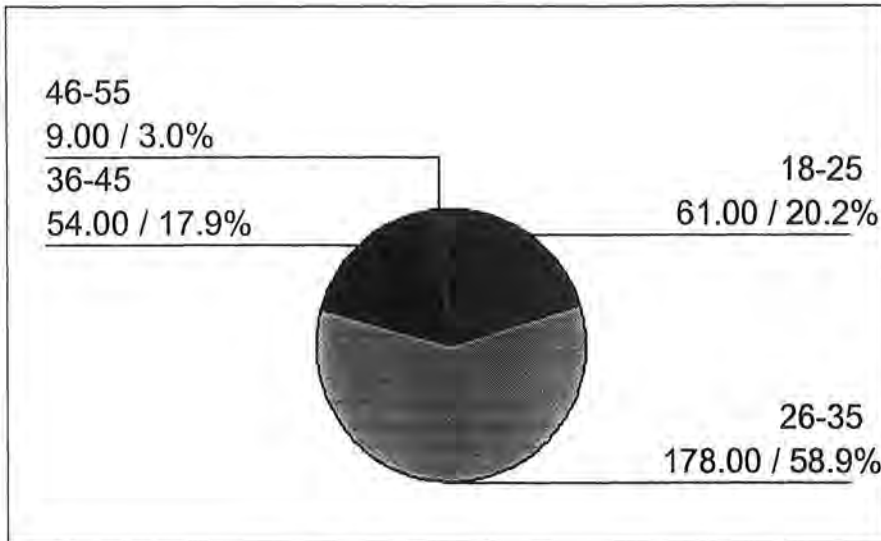
This section is divided into seven sub-sections: Section 5.3.1 presents and analyses the data on age; Section 5.3.2 deals with the data on monthly income; Section 5.3.3 considers the data on work experience both inside and outside the offset companies; Section 5.3.4 deals with the data on the worker's level of qualification; Section 5.3.5 presents and analyses the data on job title; Section 5.3.6 deals with the data on marital status; and finally, Section 5.3.7 provides a summary and conclusion for the section.

Sections 5.3.1 to 5.3.6 are organised as follows. First the researcher will present the data he obtained from the research questionnaire on each of the personal characteristics in the form of a pie chart. He will proceed to comment on the data and its potential significance in terms of existing theory on job satisfaction. He will then present the hypothesis and null hypothesis he generated for each characteristic and will report the results of the Spearman Correlation Coefficient Two-Tailed Test. He will conclude each sub-section by presenting and commenting on any crosstabulations that he generated to supplement his analysis of the data.

### 5.3.1 Age

With respect to Question 1 of the questionnaire, the question concerning age, respondents were asked to identify themselves as belonging to one of the following four groups: 18-25; 26-35; 36-45; or 46-55. The responses were as follows:

**Chart 5.2: Age**



As the figure above shows, 239 (79.1%) of the 302 respondents are younger than 36 years old and only 63 (20.9%) are 36 years and older. The high number of young employees is due to the fact that Saudi Arabia is a newly developing country, which, until recently, lacked qualified manpower of the kind needed by the offset companies.

The offset companies derive some benefits from the fact that such a large percentage of their workforce is drawn from the younger generation. Generally speaking, young employees are healthier, more receptive to training and new ideas, and have a greater potential span of years to contribute to their work than their older colleagues. However, as the researcher indicated in Chapter Three, some scholars (Schultz, 1978; Nash, 1985; and Muchinsky 1997) have argued that older and more experienced workers tend to have higher job satisfaction levels because they have more realistic expectations, have

more familial and social obligations that their work helps them to fulfil, and so on. A recent study by Oswald and Warr in 1996 found that the relationship between age and overall job satisfaction can be defined in terms of a U-shaped curve, with initial high levels of satisfaction declining until around the age of 35 and rising again thereafter.

In order to test the importance of age relative to overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H 1.1 There is a significant relationship between the respondent's age and the degree of job satisfaction.

H 0 1.1 There is no significant relationship between the respondent's age and the degree of job satisfaction.

The researcher proceeded to subject the data on age and overall job satisfaction to a Spearman Correlation Coefficient Two-Tailed Test. The result was found to be .013, which is not significant at the .05 level. Therefore, the null hypothesis that there is no significant relationship between the respondent's age and the degree of job satisfaction was accepted.

A crosstabulation of the age/overall job satisfaction shows that the 36-45 and 46-45 groups reported considerably higher percentages of overall satisfaction. However, the dissatisfaction levels for the 36-45 group were similar to those of the 18-25 and 26-35 groups, with the percentage of uncertain employees in the group being strikingly lower than that for all other age groups. The 46-55 group contained no employees who reported that they were dissatisfied or very dissatisfied, but the percentage of very satisfied employees was considerably lower than that of the other groups. Given these

figures, the relationship between age and overall satisfaction certainly does not seem very clear-cut, but it does seem that older employees are more satisfied on the whole. The researcher would suggest that age itself is not the operative factor here. Crosstabulations of age with monthly income and job title show that the older employees are concentrated in the higher income and higher job category groups. Furthermore, a crosstabulation of age and work itself (which, as the researcher will show in Section 5.4 was found to be highly significant) shows figures that are almost identical to the age and overall job satisfaction figures. If older workers tend to be in positions and jobs that give them higher pay, more authority and autonomy, and that they generally find more rewarding, it is no wonder that higher percentages report overall satisfaction.

**Table 5.3: Age/Overall Satisfaction Crosstabulation**

Age * Overall job satisfaction Crosstabulation						
		Overall job satisfaction				
		vdis	dis	dk	sat	vsat
Age	18-25	4 6.6%	4 6.6%	11 18.0%	25 41.0%	17 27.9%
	26-35	9 5.1%	22 12.4%	22 12.4%	88 49.4%	37 20.8%
	36-45	3 5.6%	7 13.0%	1 1.9%	31 57.4%	12 22.2%
	46-55			1 11.1%	7 77.8%	1 11.1%
Total		16 5.3%	33 10.9%	35 11.6%	151 50.0%	67 22.2%
						302 100.0%

**Table 5.4: Age/Monthly Income Crosstabulation****Age \* Monthly Income Crosstabulation**

		Monthly income					Total
		less than 3000sr	3001-6000	6001-9000	9001-12000	12001-15000sr	
Age	18-25	1 1.6%	28 45.9%	23 37.7%	9 14.8%		61 100.0%
	26-35		31 17.4%	47 26.4%	50 28.1%	30 16.9%	178 100.0%
	36-45	1 1.9%	4 7.4%	4 7.4%	6 11.1%	13 24.1%	26 48.1%
	46-55			1 11.1%	1 11.1%	7 77.8%	9 100.0%
	Total	2 .7%	63 20.9%	75 24.8%	65 21.5%	44 14.6%	53 17.5%

**Table 5.5: Age/Job Title Crosstabulation****Age \* Job title Crosstabulation**

		Job title					Total
		supervisor	manager	engineer	technician	clerk	security
Age	18-25	5 8.2%		8 13.1%	39 63.9%	4 6.6%	5 8.2%
	26-35	31 17.4%	19 10.7%	41 23.0%	54 30.3%	24 13.5%	9 5.1%
	36-45	10 18.5%	20 37.0%	7 13.0%	13 24.1%	3 5.6%	1 1.9%
	46-55	2 22.2%	4 44.4%	2 22.2%		1 11.1%	
	Total	48 15.9%	43 14.2%	58 19.2%	106 35.1%	32 10.6%	15 5.0%

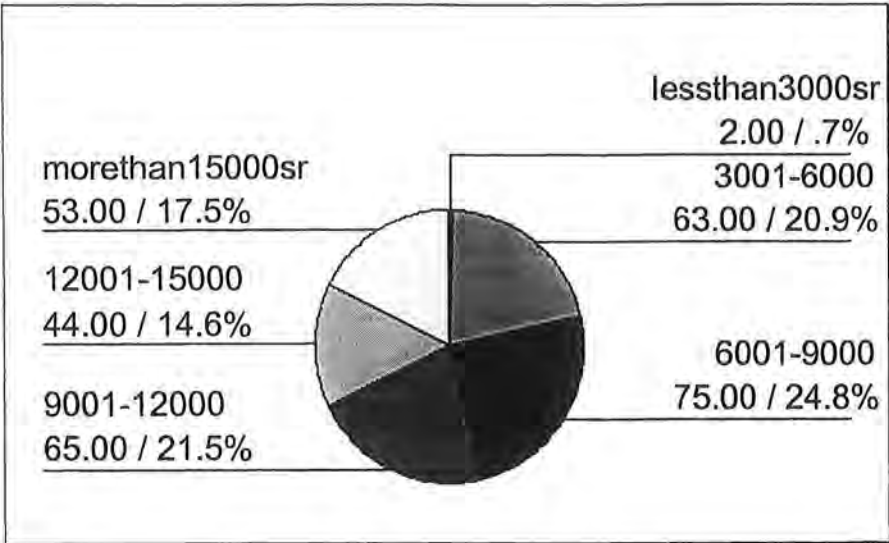
**Table 5.6: Age/Work Itself Crosstabulation****Age \* Work itself Crosstabulation**

		Work itself				Total
		vdis	dis	dk	sat	vsat
Age	18-25	4 6.6%	4 6.6%	10 16.4%	26 42.6%	17 27.9%
	26-35	8 4.5%	22 12.4%	23 12.9%	88 49.4%	37 20.8%
	36-45	3 5.6%	7 13.0%		32 59.3%	12 22.2%
	46-55			1 11.1%	7 77.8%	1 11.1%
	Total	15 5.0%	33 10.9%	34 11.3%	153 50.7%	67 22.2%

**5.3.2 Monthly Income**

For Question 2 (monthly income), the respondents were asked to specify one of the following six ranges: less than 3000 SR; 3001-6000 SR; 6001-9000 SR; 9001-12000 SR; 12001-15000 SR; or more than 15000 SR. The responses were as follows:

Chart 5.7 Monthly Income



The researcher would note, at this point, that, as one would expect, there is a considerable relationship between job title and monthly income, with the employees employed as clerks or security guards generally making less than technicians, technicians, in turn, making less than engineers, and so on. A crosstabulation between monthly income and job title gives precise data concerning the distribution of monthly income among the respondents in all job categories.

Table 5.8: Monthly Income/Job Title Crosstabulation

		Monthly income * Job title Crosstabulation					
		Job title					
		supervisor	manager	engineer	technician	clerk	security
Monthly income	less than 3000sr				1	1	2
					50.0%	50.0%	100.0%
	3001-6000	5			31	13	63
		7.9%			49.2%	20.6%	100.0%
	6001-9000	14	1	6	45	8	75
		18.7%	1.3%	8.0%	60.0%	10.7%	100.0%
	9001-12000	13	7	20	19	6	65
Total		20.0%	10.8%	30.8%	29.2%	9.2%	100.0%
	12001-15000	11	7	19	6	1	44
		25.0%	15.9%	43.2%	13.6%	2.3%	100.0%
	more than 15000sr	5	28	13	4	3	53
		9.4%	52.8%	24.5%	7.5%	5.7%	100.0%
		48	43	58	106	32	302
		15.9%	14.2%	19.2%	35.1%	10.6%	100.0%

In order to determine if there was a significant relationship between the respondents' monthly income and their overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H 1.2 There is a significant relationship between the respondent's monthly income and the degree of job satisfaction.

H 0 1.2 There is no significant relationship between the respondent's monthly income and the degree of job satisfaction.

The researcher then performed a Spearman Correlation Coefficient Two-Tailed Test, and found a significance of .181, which is somewhat significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between the respondent's monthly income and the degree of job satisfaction was rejected.

A crosstabulation between monthly income and overall job satisfaction shows that, with the exception of the two employees in the lowest income range, the vast majority of workers are either satisfied or very satisfied with their monthly incomes. The researcher will give further consideration to different aspects of pay and job satisfaction in Section 5.4.2.



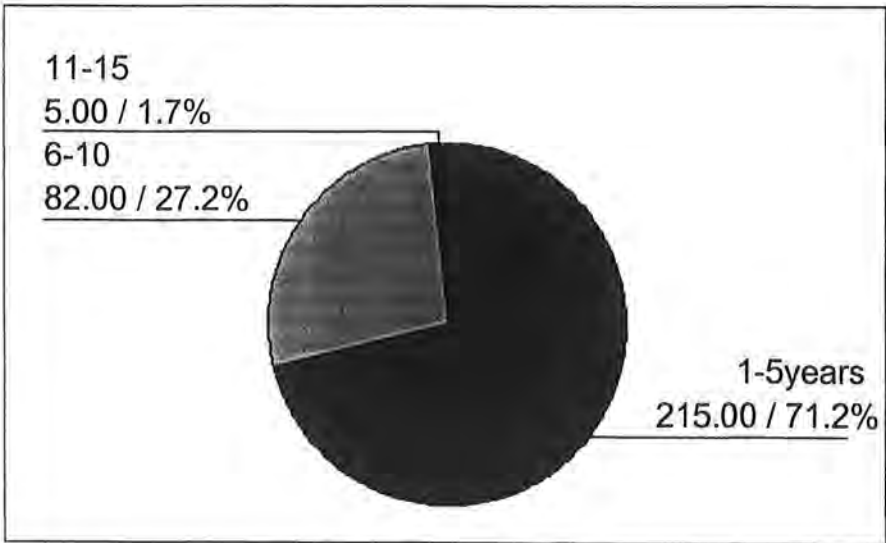
Table 5.9: Monthly Income/Overall Job Satisfaction Crosstabulation

		Overall job satisfaction					Total
		vdis	dis	dk	sat	vsat	
Monthly income	lessthan3000sr		1 50.0%	1 50.0%			2 100.0%
	3001-6000	6 9.5%	10 15.9%	12 19.0%	26 41.3%	9 14.3%	63 100.0%
	6001-9000	7 9.3%	5 6.7%	12 16.0%	29 38.7%	22 29.3%	75 100.0%
	9001-12000	2 3.1%	4 6.2%	6 9.2%	40 61.5%	13 20.0%	65 100.0%
	12001-15000		7 15.9%	3 6.8%	25 56.8%	9 20.5%	44 100.0%
	morethan15000sr	1 1.9%	6 11.3%	1 1.9%	31 58.5%	14 26.4%	53 100.0%
	Total	16 5.3%	33 10.9%	35 11.6%	151 50.0%	67 22.2%	302 100.0%

5.3.3 Experience

For the question concerning experience in their current job (Question 3), the respondents were asked to identify themselves as belonging to one of four categories: 1-5 years; 6-10 years; 11-15 years; or more than 15 years. The responses were as follows:

Chart 5.10: How many years have you worked for your current employer?



As the figure shows, the great majority (71.2 percent) of the 302 respondents have worked for their current employer for 1-5 years. Of the remaining 87 respondents, 82 (27.2 percent) reported 6-10 years of experience and only 5 (1.7 percent) reported 11-15

years. No respondents reported more than 15 years. The reason for this large percentage of employees with under six years of experience is fairly obvious: the offset companies surveyed did not become operational until 1993, even though the Peace Shield I Program, through which the companies were developed, was initiated in 1985. As indicated in these figures, in the early years, only a small number of employees were recruited (see Chapter Two for more details).

In order to test the significance of experience in one's current job as it relates to overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H 1.3 There is a significant relationship between the respondent's years of experience in his current job and the degree of job satisfaction.

H 0 1.3 There is no significant relationship between the respondent's years of experience in his current job and the degree of job satisfaction.

He proceeded to perform a Spearman Correlation Coefficient Two-Tailed Test, and found the significance to be .117, which is significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between the respondent's years of experience in his current job and the degree of job satisfaction was rejected.

The researcher's reading of the data from the respondents on the question regarding their experience in the current job leads him to conclude that, on the whole, job satisfaction seems to increase slightly with experience in the job. As the crosstabulation below shows, the workers with less than six years of experience reported higher percentages of uncertain or dissatisfied responses than most of those who had been employed for longer, although, strikingly, of the 5 employees in the 11-15 years group 1

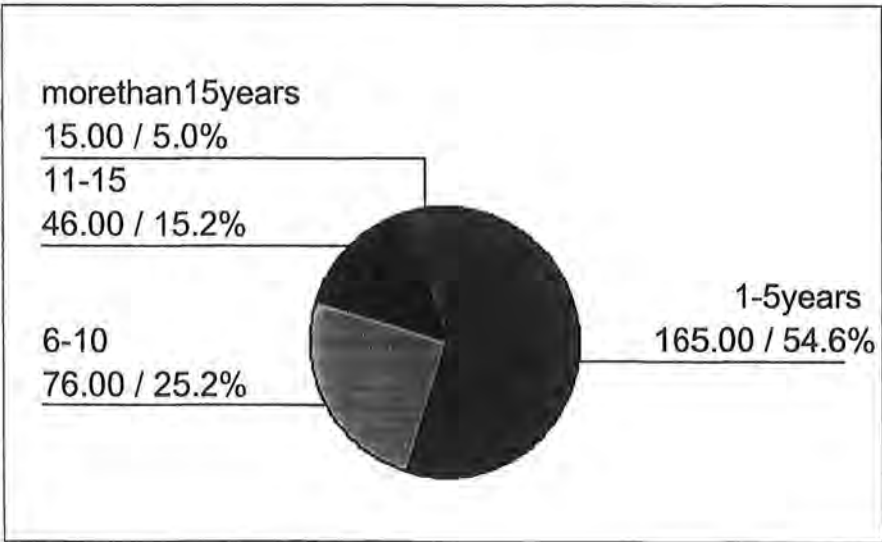
reported that he was very dissatisfied overall, and two were uncertain. The fact that the offset companies have been operational for such a short time, and that, consequently, there are few employees with many years of experience makes it difficult to draw definitive conclusions in this area.

**Table 5.11: Years in Current Job/Overall Job Satisfaction Crosstabulation**

Years in current job * Overall job satisfaction Crosstabulation							
		Overall job satisfaction					Total
		vdis	dis	dk	sat	vsat	
Years in current job	1-5years	12	29	28	101	45	215
		5.6%	13.5%	13.0%	47.0%	20.9%	100.0%
	6-10	3	4	5	49	21	82
		3.7%	4.9%	6.1%	59.8%	25.6%	100.0%
	11-15	1		2	1	1	5
		20.0%		40.0%	20.0%	20.0%	100.0%
Total		16	33	35	151	67	302
		5.3%	10.9%	11.6%	50.0%	22.2%	100.0%

Question 4 of the research questionnaire asked the respondents to supply information concerning not only their years of experience in the offset companies, but their total years of work experience in all jobs. The respondents were asked to identify themselves as belonging to one of the same four categories stated for the previous question. The responses were as follows:

**Chart 5.12: How many years have you been working (in all kinds of jobs)?**



As the table shows, more than half of the respondents (or 54.6 percent) have only 1-5 years of total work experience, and just over a quarter of the respondents have only 6-11 years of total work experience. These figures are what one would expect given the data that the researcher examined in Section 5.3.1, which showed that the workforce of the offset companies tends to be quite young, due to the fact that Saudi Arabia has only recently started to produce workers with the appropriate skills and qualifications for many of the new jobs.

In order to test the significance of overall work experience in relation to overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H 1.4 There is a significant relationship between the respondent's years of experience in all kinds of job and the degree of job satisfaction.

H 0 1.4 There is no significant relationship between the respondent's years of experience in all kinds of job and the degree of job satisfaction.

The researcher proceeded to subject the data to a Spearman Correlation Coefficient Two-Tailed Test, and found a significance of .021, which is not significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between the respondent's years of experience in all kinds of job and the degree of job satisfaction was accepted.

The following crosstabulation between years of experience in all jobs and overall job satisfaction with work in the offset companies supports the negative finding of the Spearman Correlation Coefficient test. Looking at the data, it is difficult to see any clear relationship between the two variables.

Table 5.13: Years in All Jobs/Overall Job Satisfaction Crosstabulation

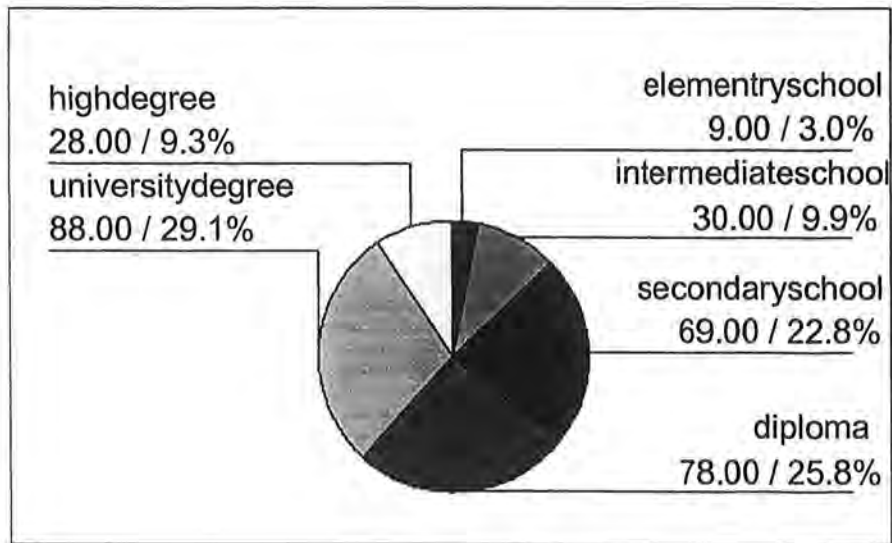
Years in all jobs \* Overall job satisfaction Crosstabulation

		Overall job satisfaction					Total
		vdis	dis	dk	sat	vsat	
Years in all jobs	1-5years	8 4.8%	22 13.3%	22 13.3%	76 46.1%	37 22.4%	165 100.0%
	6-10	3 3.9%	6 7.9%	4 5.3%	44 57.9%	19 25.0%	76 100.0%
	11-15	5 10.9%	3 6.5%	8 17.4%	20 43.5%	10 21.7%	46 100.0%
	morethan15years		2 13.3%	1 6.7%	11 73.3%	1 6.7%	15 100.0%
	Total	16 5.3%	33 10.9%	35 11.6%	151 50.0%	67 22.2%	302 100.0%

5.3.4 Qualifications

The purpose of Question 5 was to gather data about the respondents’ respective levels of education. The respondents were asked to indicate their level of highest attainment from the following list: elementary school (years 1-6); intermediate school (years 7-9); secondary school (years 10-12); diploma (a certificate from a vocational school, polytechnic or two year college); university degree (BA or BSc); or high degree (MA, MSc or PhD)

Chart 5.14:Level of Education



Given the fact that the offset companies are high technology industries, one would expect the average level of qualification to be quite high, and the data from the questionnaire bears out this expectation. As the chart above shows, 116 of the 302 respondents (38.4 percent) have either university degrees or high degrees, and, of the remaining 186 respondents, a further 78 (25.8 percent of the total sample) have a post-secondary diploma of some sort.

As the researcher explained in Chapter Three, a number of scholars have suggested that there is a connection between level of education and job satisfaction. While Nash (1985) suggested that better educated workers tend to be more satisfied, a number of other scholars (Ribeaux and Poppleton, 1978; Mottaz, 1984; and Martin and Shehan, 1989) have suggested that better educated employees tend to have higher expectations and will only be satisfied if these expectations are met.

In order to determine whether or not there was a correlation between qualifications and job satisfaction in the offset companies, the researcher generated the following hypothesis and null hypothesis:

H 1.5 There is a significant relationship between the respondent's level of qualification and the degree of job satisfaction.

H 0 1.5 There is no significant relationship between the respondent's level of qualification and the degree of job satisfaction.

A Spearman Correlation Coefficient Two-Tailed Test was then performed, and it indicated a significance of .110, which is slightly significant at .05 level. Therefore, the

null hypothesis that there is no significant relationship between the respondent's qualification and the degree of job satisfaction was rejected.

If it were the case that better educated employees in the offset companies have higher expectations and were, therefore, on the whole, less satisfied, one would expect to see a negative correlation from the Spearman Correlation Coefficient test. Instead, the data seems to indicate a slight positive correlation. The following crosstabulation between qualification and overall job satisfaction presents a fairly complex picture of the relationship between level of education and job satisfaction that supports such a conclusion. The respondents who hold a university degree or a high degree had slightly higher dissatisfaction levels than the holders of a postgraduate diploma and those who had only intermediate school qualifications. However, secondary school graduates, and those with only elementary school education reported higher percentages of dissatisfaction. Furthermore, the university and high degree holders reported slightly higher percentages of overall satisfaction than the other groups.

Table 5.15: Qualification/Overall Job Satisfaction Crosstabulation

Qualification * Overall job satisfaction Crosstabulation							
		Overall job satisfaction					Total
		vdis	dis	dk	sat	vsat	
Qualification	elementryschool		3		4	2	9
			33.3%		44.4%	22.2%	100.0%
	intermediateschool	2	1	5	15	7	30
		6.7%	3.3%	16.7%	50.0%	23.3%	100.0%
	secondaryschool	8	8	13	31	9	69
		11.6%	11.6%	18.8%	44.9%	13.0%	100.0%
	diploma	3	6	10	36	23	78
		3.8%	7.7%	12.8%	46.2%	29.5%	100.0%
	universitydegree	2	11	7	50	18	88
		2.3%	12.5%	8.0%	56.8%	20.5%	100.0%
	highdegree	1	4		15	8	28
		3.6%	14.3%		53.6%	28.6%	100.0%
Total		16	33	35	151	67	302
		5.3%	10.9%	11.6%	50.0%	22.2%	100.0%

Further crosstabulations between qualification and work itself and qualification and promotion also do not seem to support the idea that the better educated offset company

employees experience higher levels of frustrated expectations with respect to these job related factors than their less well educated counterparts.

**Table 5.16: Qualification/Work Itself Crosstabulation**

Qualification * Work itself Crosstabulation							
		Work itself					Total
		vdis	dis	dk	sat	vsat	
Qualification	elementryschool		3 33.3%		4 44.4%	2 22.2%	9 100.0%
	intermediateschool	2 6.7%	2 6.7%	4 13.3%	15 50.0%	7 23.3%	30 100.0%
	secondarieschool	8 11.6%	6 8.7%	13 18.8%	33 47.8%	9 13.0%	69 100.0%
	diploma	3 3.8%	6 7.7%	9 11.5%	37 47.4%	23 29.5%	78 100.0%
	universitydegree	1 1.1%	12 13.6%	8 9.1%	49 55.7%	18 20.5%	88 100.0%
	highdegree	1 3.6%	4 14.3%		15 53.6%	8 28.6%	28 100.0%
	Total	15 5.0%	33 10.9%	34 11.3%	153 50.7%	67 22.2%	302 100.0%

**Table 5.17: Qualification/Promotion Crosstabulation**

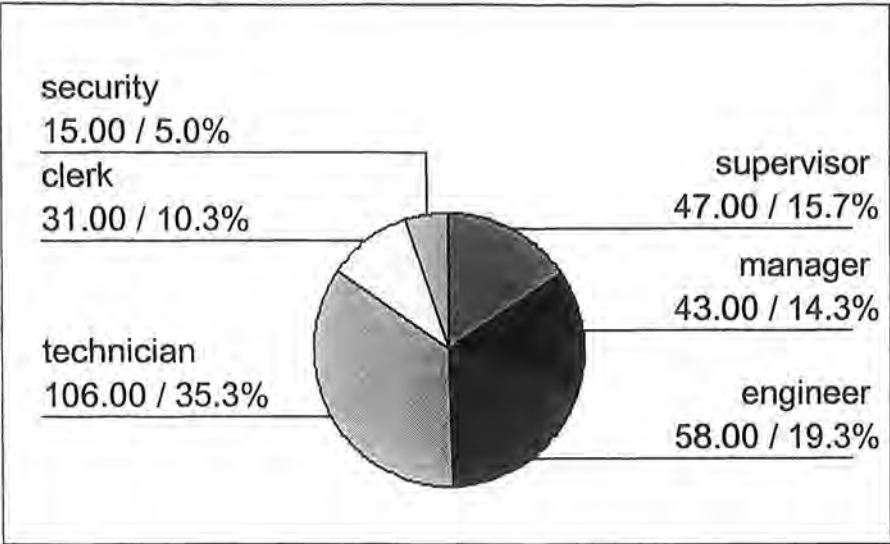
Qualification * Promotion Crosstabulation							
		Promotion					Total
		vdis	dis	dk	sat	vsat	
Qualification	elementryschool	2	3	1	3		9
		22.2%	33.3%	11.1%	33.3%		100.0%
	intermediateschool	8	2	7	10	3	30
		26.7%	6.7%	23.3%	33.3%	10.0%	100.0%
	secondarieschool	16	24	13	11	5	69
		23.2%	34.8%	18.8%	15.9%	7.2%	100.0%
	diploma	17	15	12	21	13	78
		21.8%	19.2%	15.4%	26.9%	16.7%	100.0%
	universitydegree	16	21	20	23	8	88
		18.2%	23.9%	22.7%	26.1%	9.1%	100.0%
	highdegree	3	5	10	5	5	28
		10.7%	17.9%	35.7%	17.9%	17.9%	100.0%
	Total	62	70	63	73	34	302
		20.5%	23.2%	20.9%	24.2%	11.3%	100.0%

### 5.3.5 Job Title

With respect to the question about job title (Question 6), the respondents were asked to identify themselves as belonging to one of the following job categories: security; clerk; technician; engineer; manager; or supervisor. The responses were as follows:



Chart 5.18: Job title



As the chart shows, technicians constitute the largest group with 106 employees (35.3 percent) and engineers come next with 58 employees (19.3 percent). The researcher would note that the high percentage of employees in these two areas is an indication that the Offset Program has been somewhat successful with respect to its goal of generating highly skilled, technologically competent Saudi workers. When discussing monthly income, in Section 5.3.2, the researcher indicated that there was a correlation between job title and monthly income. At this point, he would also point out that, as one would expect, there is a similar correlation between qualification and job title. As the following crosstabulation shows, the better educated employees tend to be strongly concentrated in the higher job categories such as supervisor, manager and engineer, while the less educated employees are concentrated in the lower positions such as clerk and security guard.

**Table 5.19: Qualification/Job Title Crosstabulation**

Job title * Qualification Crosstabulation								
		Qualification					Total	
		elementry school	intermediateschool	secondar yschool	diploma	university degree		highdegr ee
Job title	supervisor		5	11	15	13	4	48
			10.4%	22.9%	31.3%	27.1%	8.3%	100.0%
	manager			1	3	25	14	43
				2.3%	7.0%	58.1%	32.6%	100.0%
	engineer	1		1	3	44	9	58
		1.7%		1.7%	5.2%	75.9%	15.5%	100.0%
	technician	2	14	35	52	2	1	106
		1.9%	13.2%	33.0%	49.1%	1.9%	.9%	100.0%
	clerk	2	6	16	4	4		32
		6.3%	18.8%	50.0%	12.5%	12.5%		100.0%
	security	4	5	5	1			15
		26.7%	33.3%	33.3%	6.7%			100.0%
	Total	9	30	69	78	88	28	302
		3.0%	9.9%	22.8%	25.8%	29.1%	9.3%	100.0%

In order to test the significance of the relationship between job title and overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H 1.6 There is a significant relationship between the respondent's job title and the degree of job satisfaction.

H 0 1.6 There is no significant relationship between the respondent's job title and the degree of job satisfaction.

The researcher then performed a Spearman Correlation Coefficient Two-Tailed Test and found a significance of  $-.132^*$ , which is somewhat significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between the respondent's job title and the degree of job satisfaction was rejected.

\*The fact that a negative rather than a positive correlation was found here is misleading. The data does not suggest that those in higher job categories are less satisfied than lower ranking employees, but rather that the contrary is the case. Reference to Table 5.20 clarifies the issue, showing satisfaction by job category. The negative value is a result of the fact that the data for this personal characteristic was entered in order from the highest to the lowest category, while the data for most other characteristics was entered from lowest to highest.

The crosstabulation presented in Table 5.20 supports the finding of the Spearman Correlation Coefficient test that job title was significant in influencing the overall level of job satisfaction among offset company employees. The data shows that managers were the most satisfied followed by engineers, supervisors and technicians. Clerks and security guards were less satisfied overall. Moreover, further crosstabulations show that the higher-ranking employees are more satisfied than the lower ranks with job-related factors such as the work itself, pay, job benefits, and recognition.

**Table 5.20: Job Title/Overall Job Satisfaction Crosstabulation**

Job title * Overall job satisfaction Crosstabulation							
		Overall job satisfaction					Total
		vdis	dis	dk	sat	vsat	
Job title	supervisor	2 4.2%	3 6.3%	5 10.4%	27 56.3%	11 22.9%	48 100.0%
	manager		3 7.0%	3 7.0%	28 65.1%	9 20.9%	43 100.0%
	engineer	3 5.2%	7 12.1%	2 3.4%	33 56.9%	13 22.4%	58 100.0%
	technician	7 6.6%	11 10.4%	20 18.9%	44 41.5%	24 22.6%	106 100.0%
	clerk	1 3.1%	5 15.6%	3 9.4%	15 46.9%	8 25.0%	32 100.0%
	security	3 20.0%	4 26.7%	2 13.3%	4 26.7%	2 13.3%	15 100.0%
	Total	16 5.3%	33 10.9%	35 11.6%	151 50.0%	67 22.2%	302 100.0%

**Table 5.21: Job Title/Work Itself Crosstabulation**

		Job title * Work itself Crosstabulation				
		Work itself				
		vdis	dis	dk	sat	vsat
Job title	supervisor	2 4.2%	3 6.3%	5 10.4%	27 56.3%	11 22.9%
	manager		3 7.0%	3 7.0%	28 65.1%	9 20.9%
	engineer	3 5.2%	7 12.1%	2 3.4%	33 56.9%	13 22.4%
	technician	7 6.6%	11 10.4%	20 18.9%	44 41.5%	24 22.6%
	clerk	1 3.1%	5 15.6%	3 9.4%	15 46.9%	8 25.0%
	security	3 20.0%	4 26.7%	2 13.3%	4 26.7%	2 13.3%
	Total	16 5.3%	33 10.9%	35 11.6%	151 50.0%	67 22.2%

**Table 5.22: Job Title/Pay Crosstabulation**

		Job title * Pay Crosstabulation				
		Pay				
		vdis	dis	dk	sat	vsat
Job title	supervisor	6 12.5%	12 25.0%	5 10.4%	21 43.8%	4 8.3%
	manager		15 34.9%	3 7.0%	21 48.8%	4 9.3%
	engineer	8 13.8%	13 22.4%	4 6.9%	25 43.1%	8 13.8%
	technician	16 15.1%	19 17.9%	9 8.5%	46 43.4%	16 15.1%
	clerk	1 3.1%	11 34.4%	1 3.1%	15 46.9%	4 12.5%
	security	2 13.3%	4 26.7%	2 13.3%	4 26.7%	3 20.0%
	Total	33 10.9%	74 24.5%	24 7.9%	132 43.7%	39 12.9%

**Table 5.23: Job Title/Job Benefits Crosstabulation**

		Job title * Job benefits Crosstabulation				
		Job benefits				
		vdis	dis	dk	sat	vsat
Job title	supervisor	2 4.2%	9 18.8%	6 12.5%	27 56.3%	4 8.3%
	manager	1 2.3%	5 11.6%	8 18.6%	26 60.5%	3 7.0%
	engineer	2 3.4%	13 22.4%	10 17.2%	29 50.0%	4 6.9%
	technician	15 14.2%	23 21.7%	15 14.2%	42 39.6%	11 10.4%
	clerk		10 31.3%	3 9.4%	18 56.3%	1 3.1%
	security	2 13.3%	6 40.0%	1 6.7%	4 26.7%	2 13.3%
	Total	22 7.3%	66 21.9%	43 14.2%	146 48.3%	25 8.3%

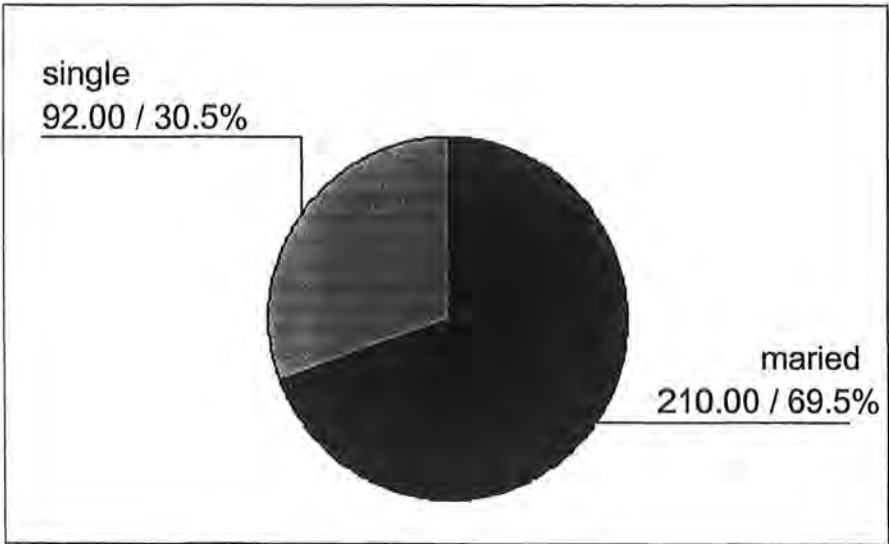
Table 5.24: Job-Title/Recognition Crosstabulation

		Recognition					Total
		vdis	dis	dk	sat	vsat	
Job title	supervisor	9 18.8%	9 18.8%	4 8.3%	21 43.8%	5 10.4%	48 100.0%
	manager	2 4.7%	7 16.3%	5 11.6%	25 58.1%	4 9.3%	43 100.0%
	engineer	3 5.2%	15 25.9%	10 17.2%	17 29.3%	13 22.4%	58 100.0%
	technician	18 17.0%	22 20.8%	14 13.2%	29 27.4%	23 21.7%	106 100.0%
	clerk	1 3.1%	8 25.0%	8 25.0%	11 34.4%	4 12.5%	32 100.0%
	security	4 26.7%	4 26.7%	1 6.7%	2 13.3%	4 26.7%	15 100.0%
Total		37 12.3%	65 21.5%	42 13.9%	105 34.8%	53 17.5%	302 100.0%

5.3.6 Marital Status

With respect to Question 7, which had to do with marital status, the respondents were given two options: single or married. The responses were as follows:

Chart 5.25: Marital status



As the chart clearly demonstrates, more than two thirds of the employees working in the Offset Companies are married. This is not surprising. The average age for marriage in Saudi Arabia is in the mid-twenties and the majority of the respondents fall within the

25-36 age group. It stands to reason that marital status may be significant in relation to overall job satisfaction since married employees have family obligations that single employees do not have. Consequently, married employees may have more demands on their income, and may be less satisfied with pay or other work-related factors.

In order to test the importance of marital status in relation to overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H 1.7 There is a significant relationship between the respondent's marital status and the degree of job satisfaction.

H 0 1.7 There is no significant relationship between the respondent's marital status and the degree of job satisfaction.

The researcher proceeded to subject the data to a Spearman Correlation Coefficient Two-Tailed Test. He found a significance of  $-.031^*$ , which is not significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between the respondent's marital status and the degree of job satisfaction was accepted.

The following crosstabulation shows that married employees were marginally more satisfied overall with their jobs than single employees, although as the Spearman Correlation Coefficient test indicates, not really to a statistically significant extent given the parameters defined for the study. A further crosstabulation between marital status and pay also shows similar percentages for both groups. Again the group of married

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\*Again, the negative correlation here is a result of the order in which the data was entered. As the crosstabulation in Table 5.25 shows, married employees reported a marginally higher percentage of satisfaction than single employees.

respondents expressed a slightly higher percentage of satisfaction, but also a higher percentage that was very dissatisfied.

**Table 5.26: Marital Status/Overall Job Satisfaction Crosstabulation**

Marital status * Overall job satisfaction Crosstabulation							
		Overall job satisfaction					Total
		vdis	dis	dk	sat	vsat	
Marital status	married	11 5.2%	20 9.5%	23 11.0%	111 52.9%	45 21.4%	210 100.0%
	single	5 5.4%	13 14.1%	12 13.0%	40 43.5%	22 23.9%	92 100.0%
Total		16 5.3%	33 10.9%	35 11.6%	151 50.0%	67 22.2%	302 100.0%

**Table 5.27: Marital Status/Pay Crosstabulation**

Marital status * Pay Crosstabulation							
		Pay					Total
		vdis	dis	dk	sat	vsat	
Marital status	married	24 11.4%	49 23.3%	14 6.7%	97 46.2%	26 12.4%	210 100.0%
	single	9 9.8%	25 27.2%	10 10.9%	35 38.0%	13 14.1%	92 100.0%
Total		33 10.9%	74 24.5%	24 7.9%	132 43.7%	39 12.9%	302 100.0%

### 5.3.7 Personal Characteristics and Job Satisfaction: Summary and Conclusion

The researcher’s aim in this section was to present and analyse the data he obtained from the research questionnaire about the respondents’ personal characteristics. As the researcher explained previously, his second objective for the empirical research project was to determine whether or not there was a significant relationship between the personal characteristics of the offset company employees and their overall levels of job satisfaction. In keeping with this objective, the researcher formulated the appropriate hypothesis and null hypothesis for each characteristic and performed Spearman Correlation Coefficient Two-Tailed Tests to determine which null hypotheses should be accepted or rejected. A summary of the results of these tests is presented in the following table:

**Table 5.28: Correlation Coefficients for Personal Characteristics**

SPEARMAN CORRELATION COEFFICIENTS FOR PERSONAL CHARACTERISTICS		
Name of Factor	Significance	Null Hypothesis
Age	.013	Accepted
Monthly Income	.181	Rejected
Exp. In Current Job	.117	Rejected
Exp. In All Jobs	.021	Accepted
Level of Qualification	.110	Rejected
Job Title	-.132**	Rejected
Marital status	-.031	Accepted

Taking into account the considerations that he presented in Section 5.2, the researcher supplemented the analysis suggested by the Spearman Correlation Coefficient tests by performing a number of crosstabulations in SPSS to obtain a more specific and detailed understanding of the data. As the researcher explained in each of the sub-sections, the figures shown in the crosstabulations tended to support the findings of the Spearman tests.

The researcher would stress at this point that, taken as a whole, he must conclude that the respondents' personal characteristics are not particularly significant in relation to the high overall levels of job satisfaction which the participating offset company employees expressed in their responses to the research questionnaire. As the researcher will show in Section 5.4, the levels of significance accruing to the personal characteristics investigated in Part One of the questionnaire, even the levels accruing to those that were found to be significant, were not particularly high when compared to the values accruing to the job-related factors the researcher investigated in Part Two of the questionnaire.

Age, experience in all jobs and marital status were found to be statistically insignificant, (in terms of the .05 level of significance parameter defined for the study) in relation to

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\* A more complete table showing the data as it was summarised in the context of the SPSS program is presented in the concluding section of this chapter.

\*\* Refer to the footnote in Section 5.3.5.



overall job satisfaction. Experience and level of qualification were found to be slightly significant with more experienced and more qualified employees reporting marginally higher levels of satisfaction. Monthly income and job title were more significant, but still at relatively low levels, with higher earners and those in ranking positions reporting higher levels of satisfaction.

## **5 4 Job-Related Factors and Job Satisfaction**

Part Two of the questionnaire contained questions designed to provide data about the respondents' levels of satisfaction with specific intrinsic and extrinsic job-related factors. As the researcher explained in Chapter Four, for practical reasons, because many of the intrinsic factors are closely related to each other, they were collectively considered as one factor: work itself. The extrinsic factors examined included: pay; job benefits; recognition; supervision; promotion; working conditions; co-workers; status; and organisation policies. The researcher's aim in this section is to present and analyse the data he obtained from the responses to this part of the research questionnaire.

As the researcher explained previously, his third objective for the empirical research project was to determine whether or not the job-related factors considered both collectively and individually, contributed significantly to the workers' overall levels of job satisfaction. As he did with the data on personal characteristics, the researcher sought to meet this objective partly by subjecting the data to statistical analysis using SPSS. It should be noted at this point that the data gathered in Part Two of the research questionnaire was different in two significant ways from the data obtained in Part One.

The first significant difference is that the data in Part Two was ordinal while the data in Part One was nominal. That is to say, in Part One of the questionnaire, the respondents

were not being asked to express their satisfaction about personal characteristics such as age, monthly income, etc. They were simply indicating which of the pre-defined categories they fit into. In Part Two by contrast, the respondents were being asked to answer in terms of a coded value representing one of the five different degrees of satisfaction expressed in the Likert rating scale: a (1) was coded as “very dissatisfied”; a (2) was coded as “dissatisfied”; a (3) was coded as “don’t know”; a (4) was coded as “satisfied”; and a (5) was coded as “very satisfied”.

The second significant difference between the data from Part Two and that from Part One was the number of questions relating to each potential factor examined. Whereas the researcher only asked one question to gain information about each of the personal characteristics, he asked a number of different questions about each of the job-related factors, in order to examine different, and potentially important, aspects of these factors.

The Spearman Correlation Coefficient Two-Tailed Test is equally applicable to both nominal and ordinal data, so it was possible to apply the same primary statistical technique to the data from Part Two as the researcher applied to the data in Part One. However, as was the case with the data from Part One, the researcher took account of the considerations identified in Section 5.2 and did not rely exclusively on the Spearman test when analysing the data’s relationship with the overall level of job satisfaction. Because each job-related factor, unlike the personal characteristics, had its own satisfaction value, and because there were a number of questions for each factor, it was easier for the researcher, when he was looking at the responses to Part Two of the questionnaire, to get a sense of which areas the workers had particularly strong feelings about. Consequently, the researcher was able to supplement the data obtained from the questionnaire with data from follow-up interviews conducted with offset company

employees, especially in areas where the workers had expressed particularly high percentages of uncertainty or dissatisfaction. Where it seemed appropriate, the researcher also conducted crosstabulations with other data (i.e., the satisfaction levels expressed with respect to personal characteristics) in order to gain a more comprehensive and detailed understanding of the potential implications of the data.

This section is divided into eleven sub-sections: Section 5.4.1 presents and analyses the data on satisfaction with the work itself; Section 5.4.2 examines the data on satisfaction with pay; Section 5.4.3 deals with the data on job benefits; Section 5.4.4 considers the data on recognition; Section 5.4.5 looks at the data on the workers' feelings about supervision; Section 5.4.6 presents and analyses the data on satisfaction levels as they relate to promotion; Section 5.4.7 considers working conditions; Section 5.4.8 looks at employee attitudes about co-workers; Section 5.4.9 examines how the workers feel about status; Section 5.4.10 investigates satisfaction with organisation policy; and finally, Section 5.4.11 provides a summary and conclusion for the section.

Sections 5.4.1 to 5.4.10 are organised as follows. First the researcher will present the data he obtained from the research questionnaire on each of the questions for each job-related factor. The format is the same for each: a table and chart illustrating the levels of satisfaction (according to Likert scale) associated with each item. He will proceed to comment on the responses and, where appropriate, will incorporate crosstabulations with other factors and/or data obtained from the interviews in order to supplement his analysis. The researcher will then consider each factor's potential significance in terms of existing theory on job satisfaction and will present the hypothesis and null hypothesis he generated for testing its significance relative to the baseline of overall satisfaction. He will conclude each sub-section by reporting the results of the Spearman Correlation

Coefficient Two-Tailed Test, and commenting briefly on how the results correspond to the other data that he has presented in the section.

5.4.1 Work Itself

This part of the questionnaire, which aimed to measure the level of job satisfaction in relation to work itself, was the longest single section of the questionnaire because it dealt with the closely related intrinsic factors as a single factor. It contained seventeen items. Each item focused on one of the potential factors in this area that might affect the workers’ levels of job satisfaction. The last question aimed to measure respondents’ satisfaction with their work in general. The response to this question was used to conduct the Spearman Correlation Coefficient test to establish the strength of the relationship between work itself and overall job satisfaction.

The responses for this section of the questionnaire were as follows:

Table and Chart 5.29. The opportunity for training and experience on the job

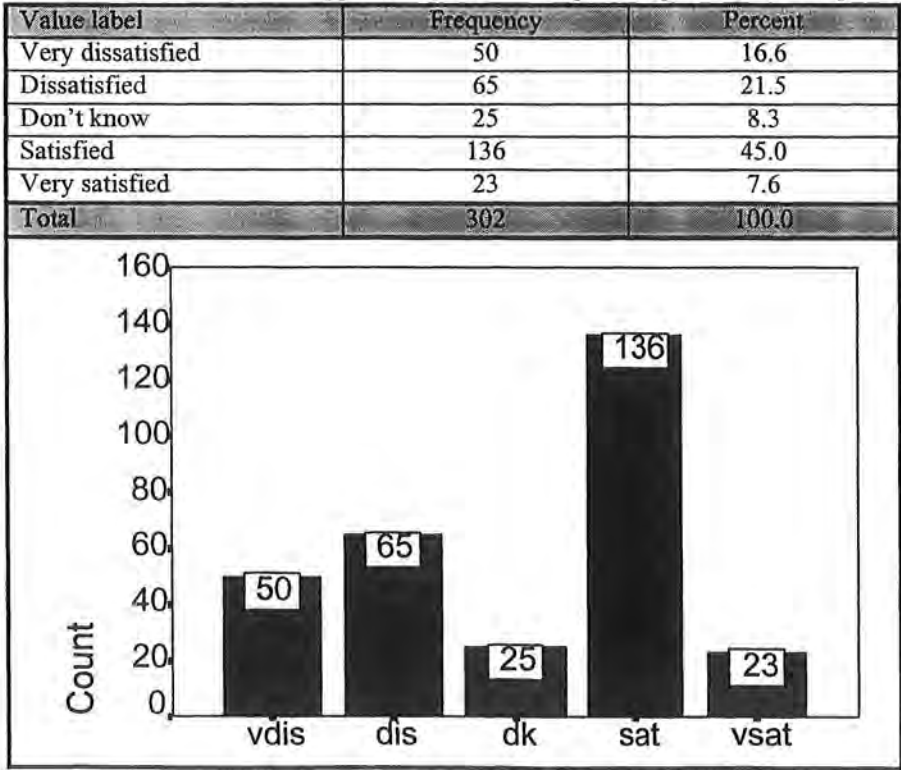


Table and Chart 5.30: The opportunity to learn new things.

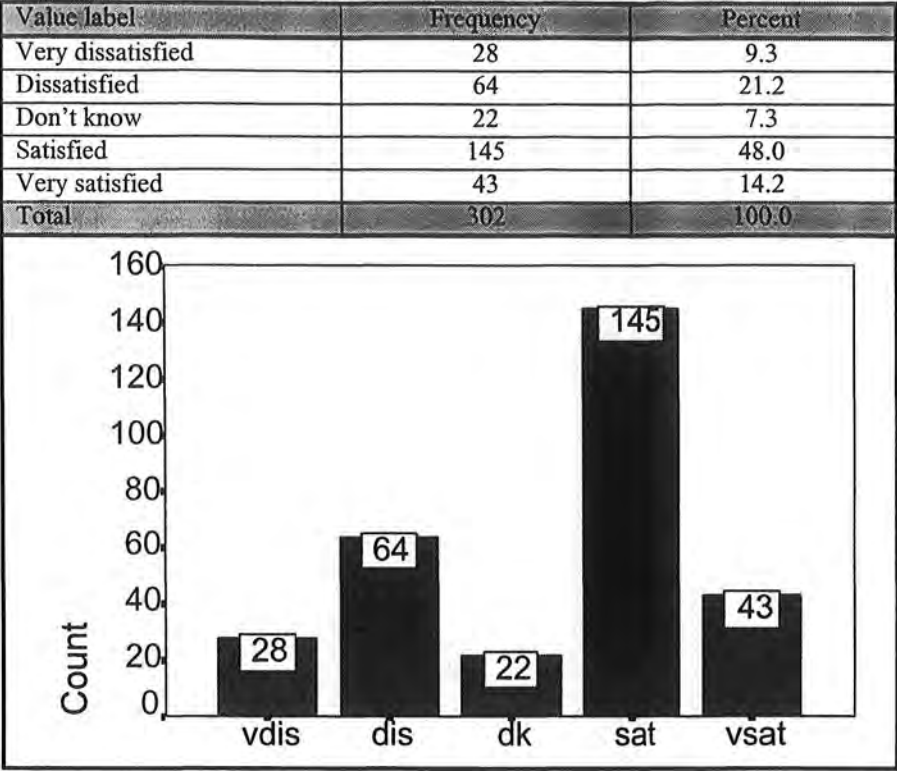
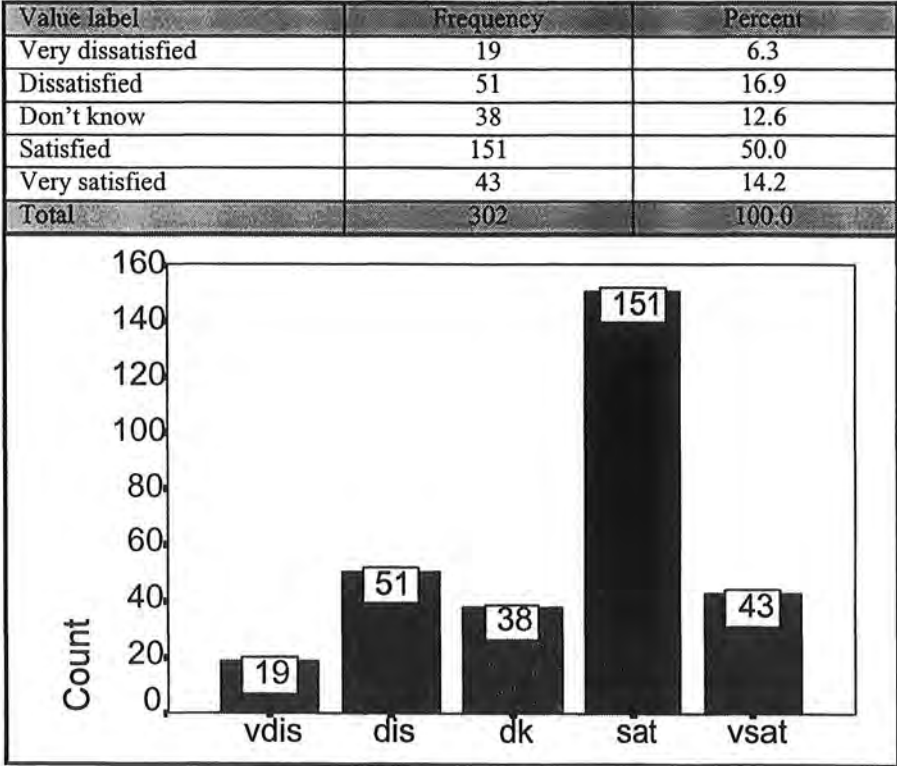
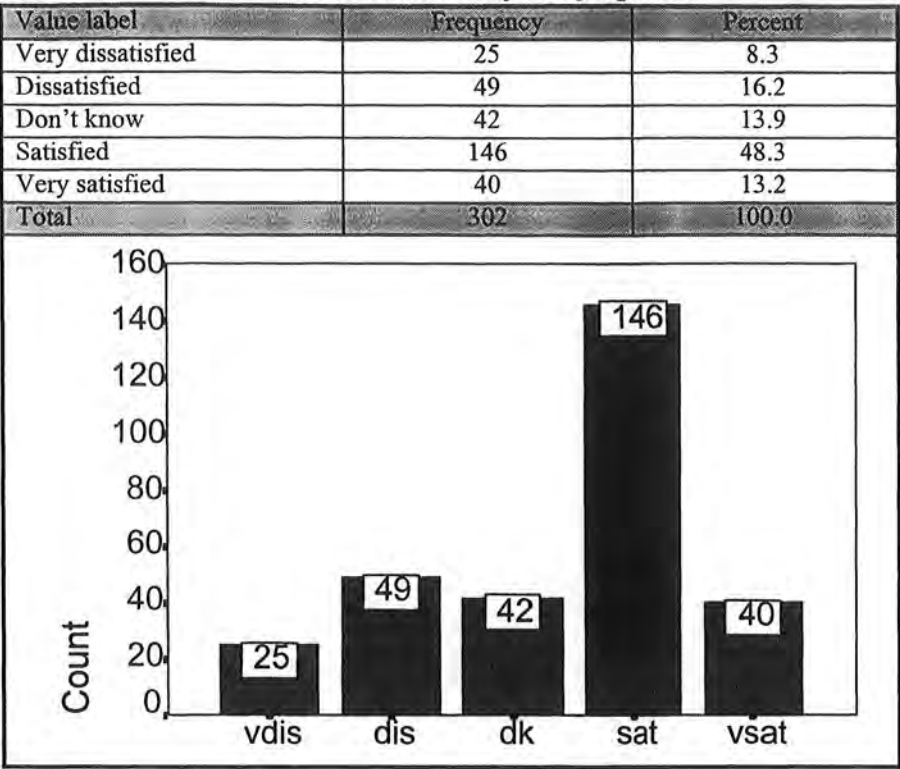


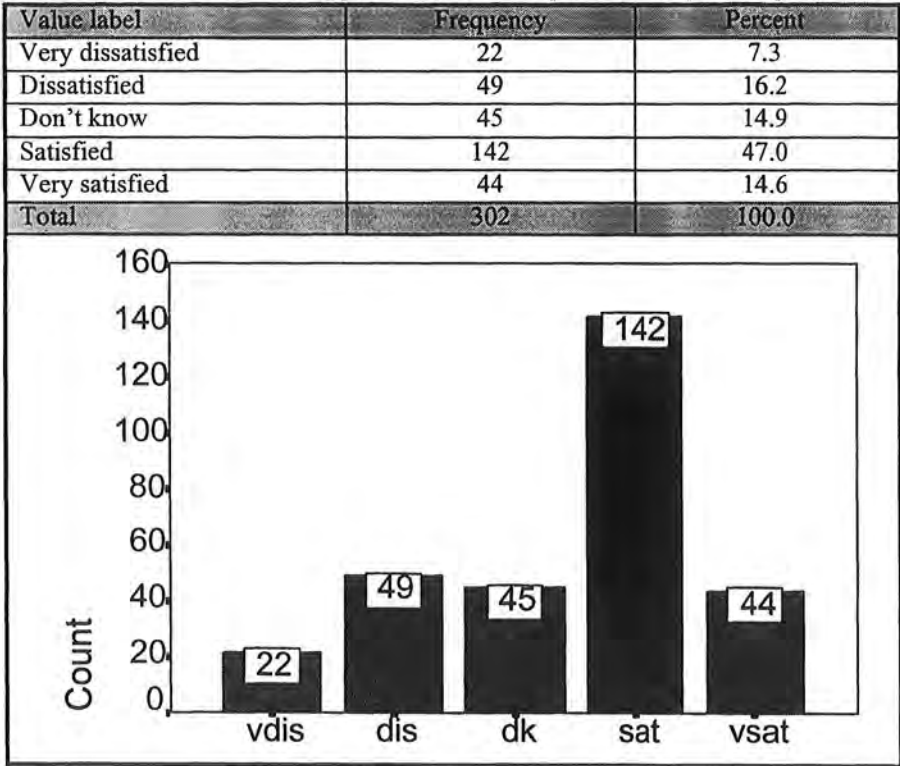
Table and Chart 5.31: The opportunity to do a whole job



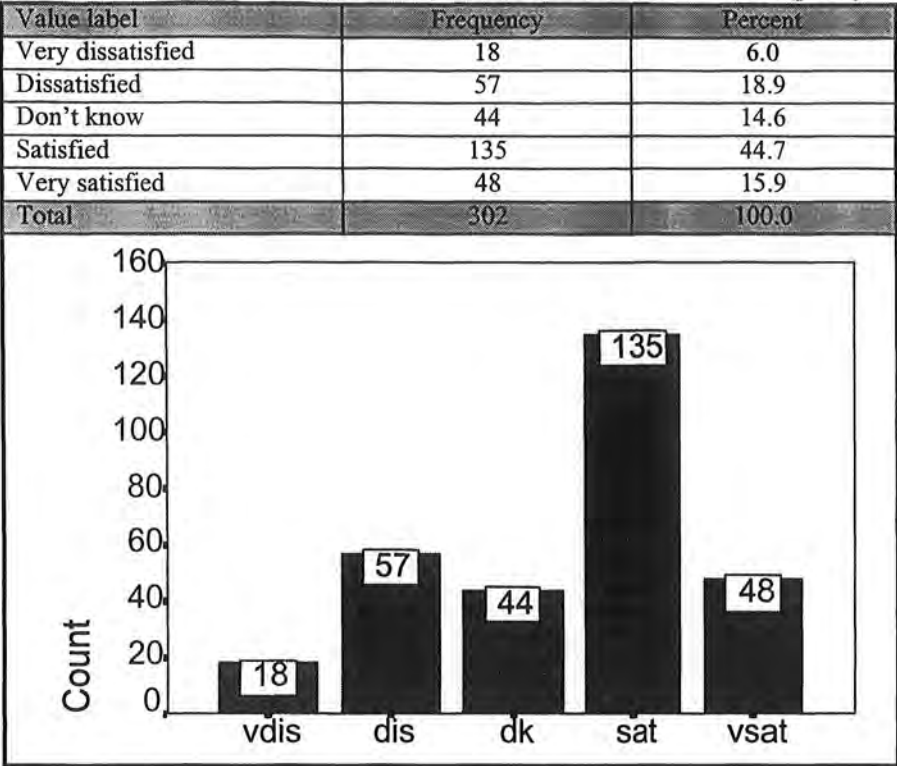
**Table and Chart 5.32: The freedom to use my own judgement**



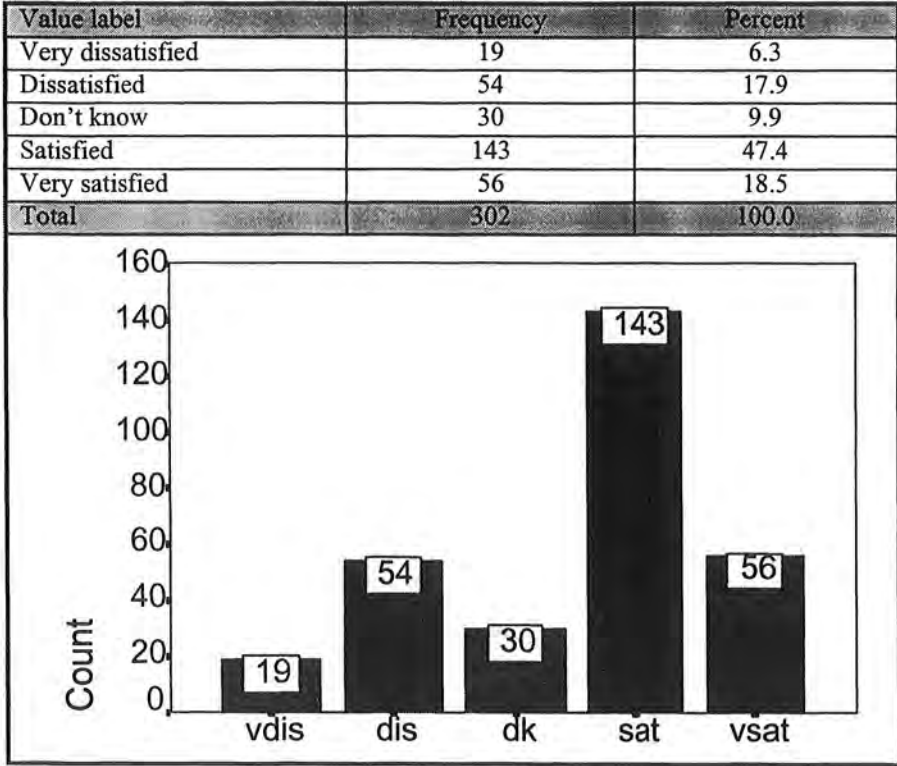
**Table and Chart 5.33: The opportunity to be responsible for planning my work**



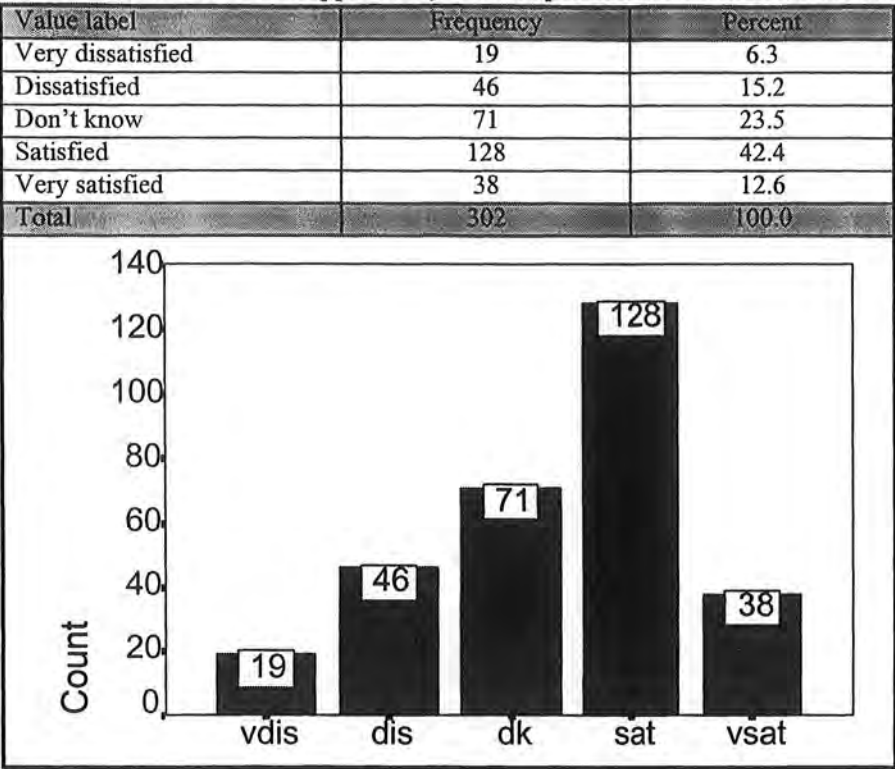
**Table and Chart 5.34: The opportunity to try my own methods of doing the job**



**Table and Chart 5.35: The opportunity to do my best at all times**



**Table and Chart 5.36: The opportunity to be responsible for the work of the others**



**Table and Chart 5.37: The opportunity to develop my skills and abilities**

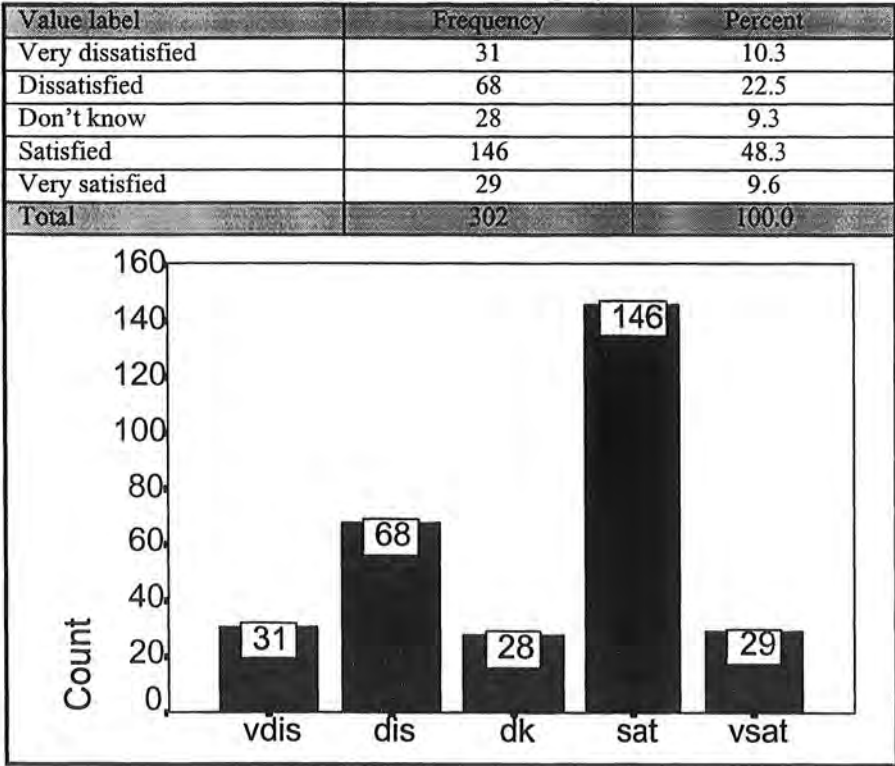




Table and Chart 5.38: Being able to do something I think is worthwhile

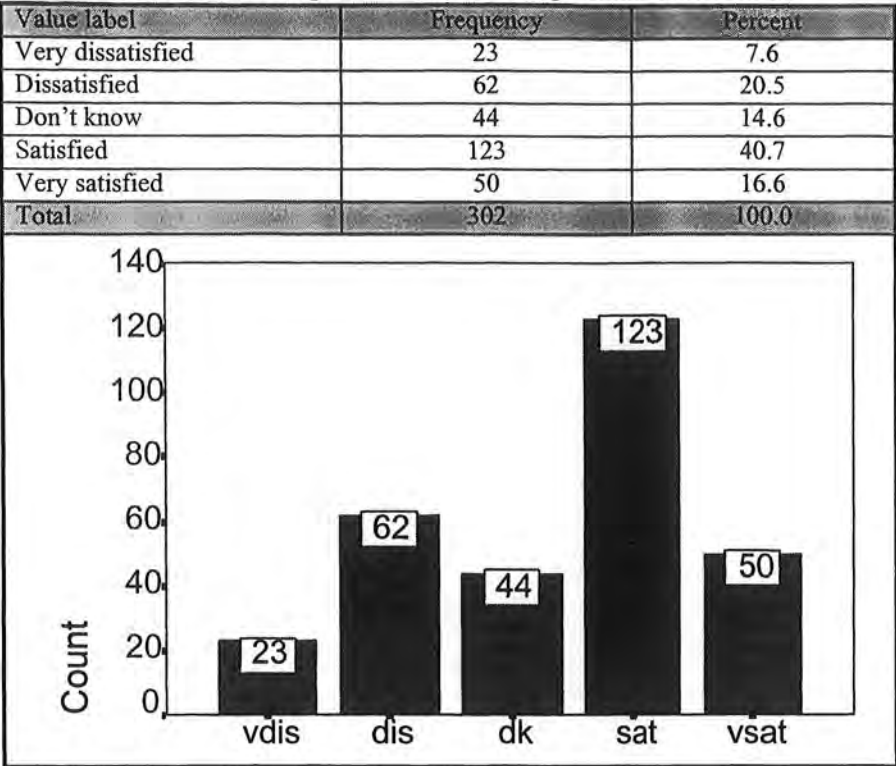


Table and Chart 5.39: The opportunity to try out some of my ideas

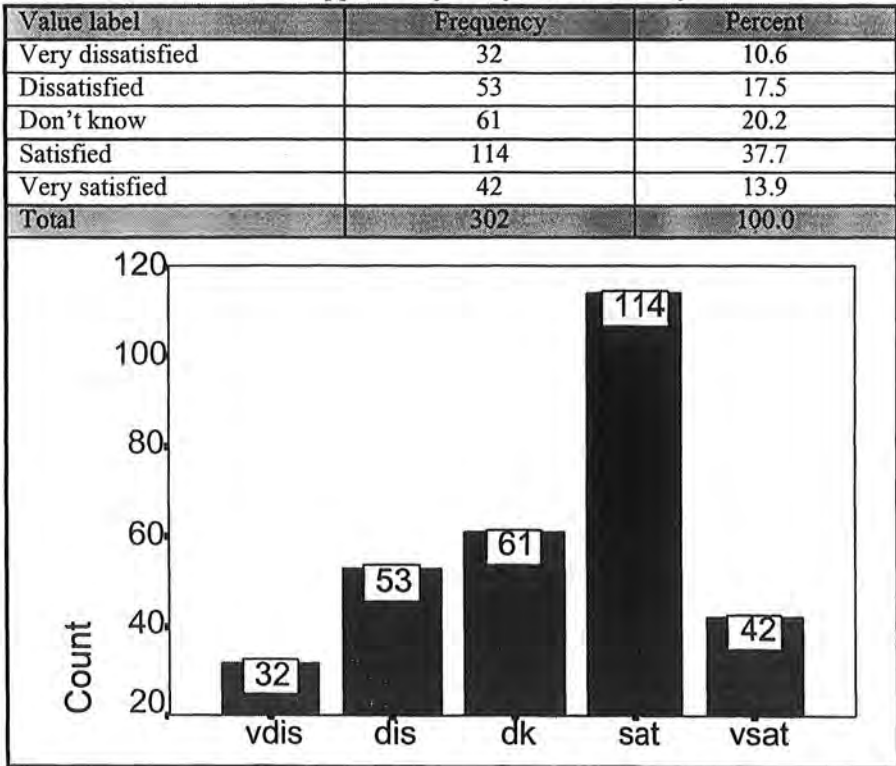


Table and Chart 5.40: The opportunity to develop new and better ways to do my job

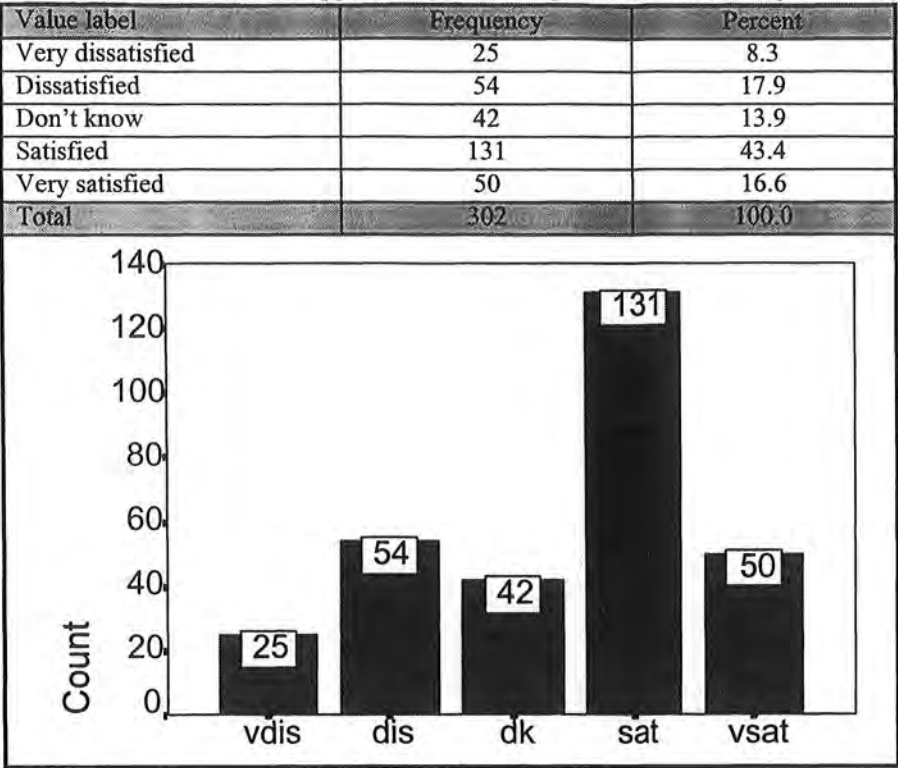


Table and Chart 5.41: The opportunity to make decisions on my own

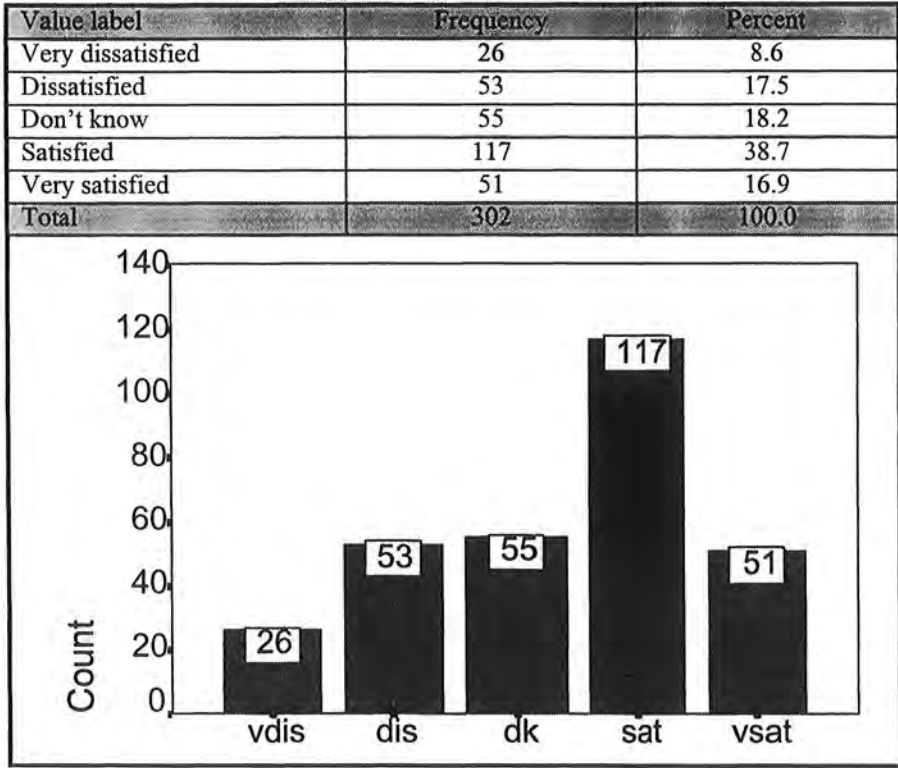


Table and Chart 5.42: The creativity of my job

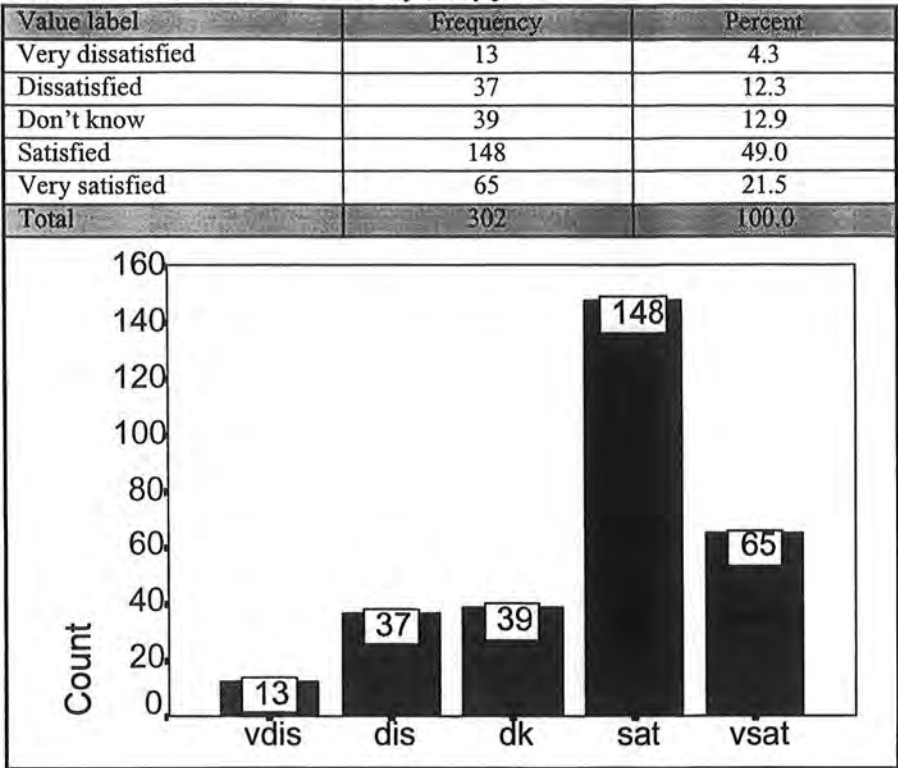
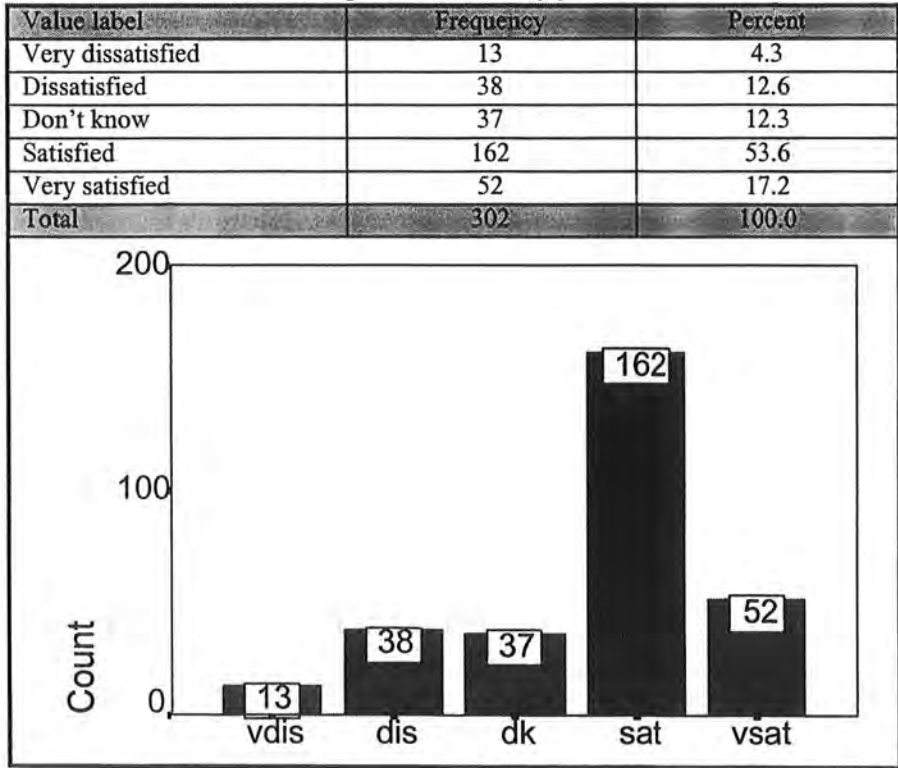
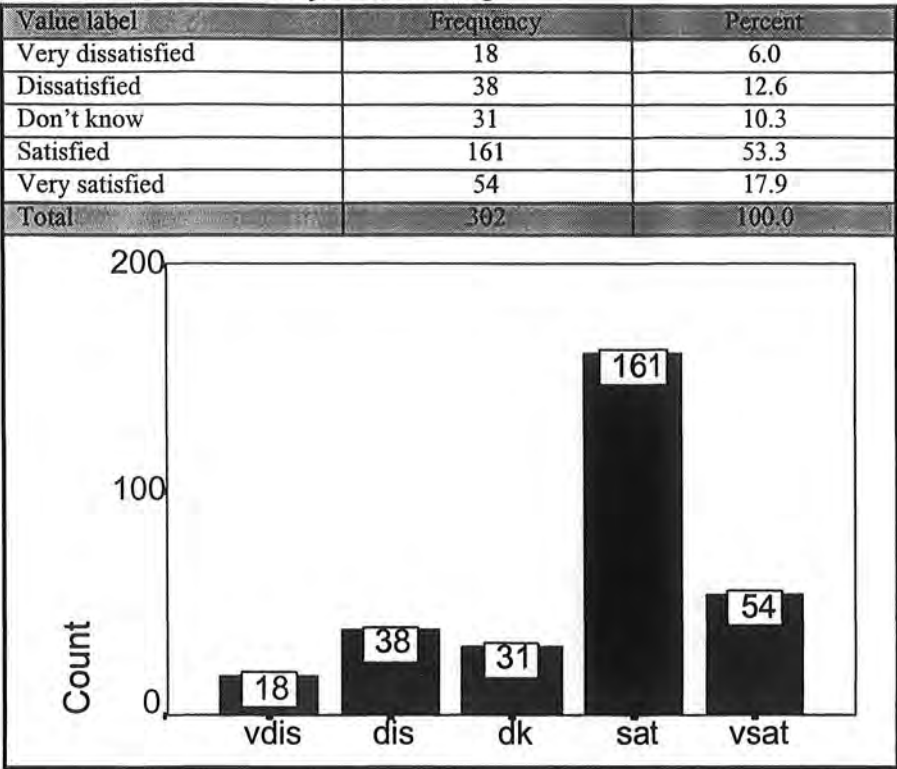


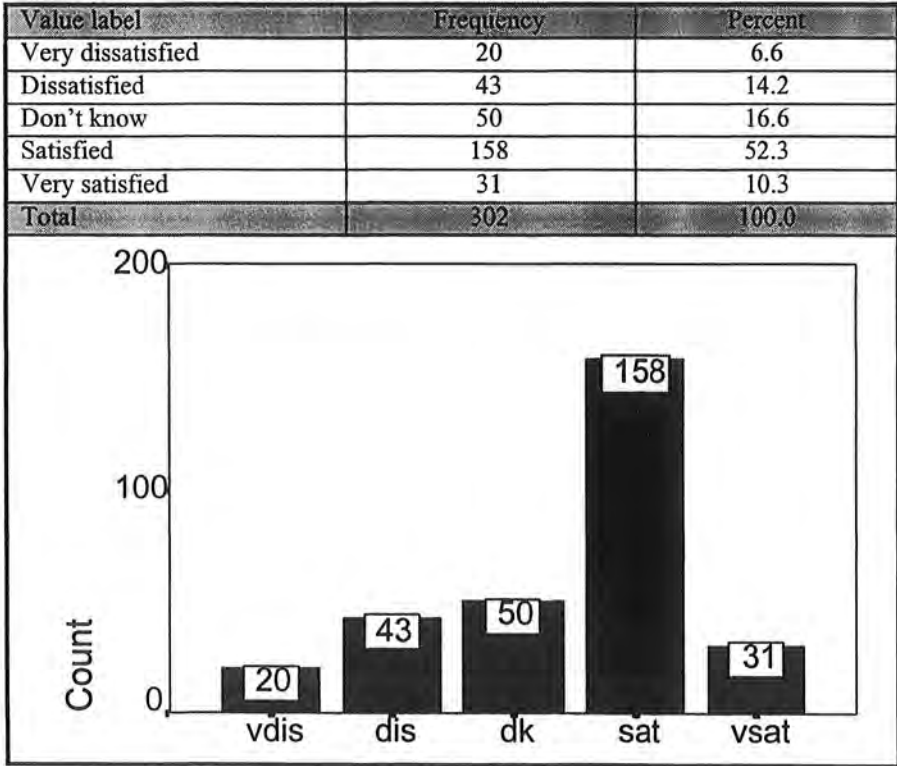
Table and Chart 5.43: The responsibilities of my job



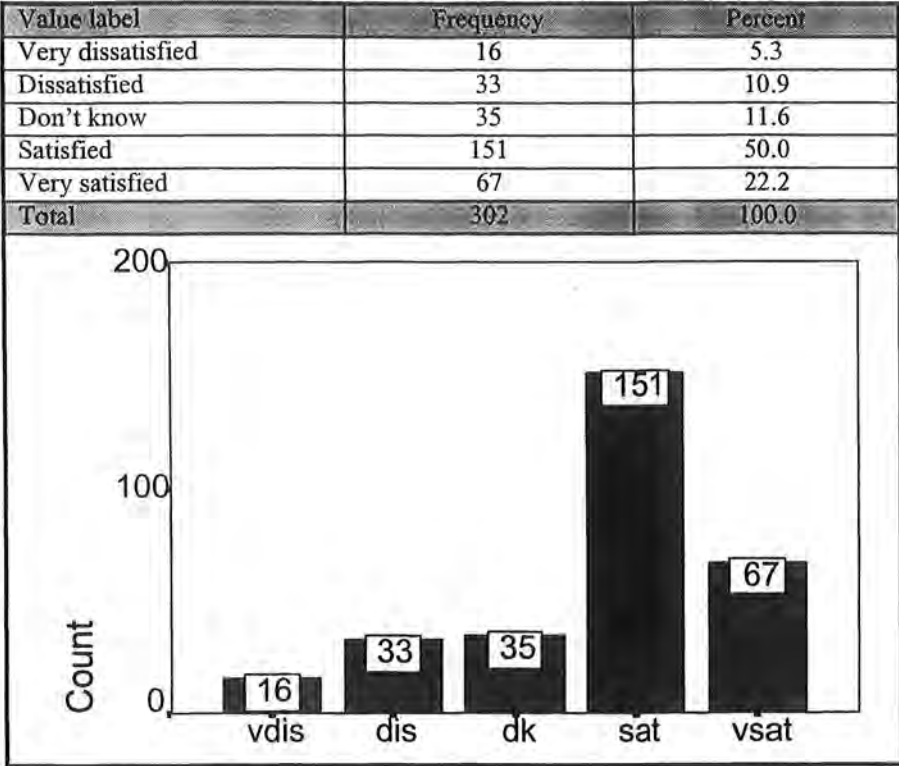
**Table and Chart 5.44: The job I am holding**



**Table and Chart 5.45: The difficulties of my job**



**Table and Chart 5.46: All in all, to what extent are you satisfied with the work you perform?**



In both the private and public sectors, training is a very important factor with respect to enabling employees to progress in their careers. This is especially the case in high technology companies such as the offset companies, which deal with very sophisticated equipment. However, the responses to Question 8 (Table 5.29) seem to indicate a shortage of opportunities for employees to develop through training, although a slight majority of respondents reported satisfaction in this area. The interviews confirm the conclusion that workers would like to see improvement. A frequent complaint was that there were simply not enough training courses provided by the offset companies, either inside Saudi Arabia or abroad. One respondent mentioned that there was no independent budget for training. Another argued that training was directed only towards the work that employees were already doing, and did not extend their skills to enable them to take on other tasks. It was also suggested that favouritism played a major role in the selection of employees for training courses.

The responses to Question 9 (Table 5.30) show that almost two-thirds of the respondents were satisfied with their learning opportunities. To some extent, the relative youth of the respondents and the fact that many of them are constantly using new and sophisticated equipment may contribute to their feeling that they are learning new things. However, nearly a third of the respondents said that they were not satisfied with their learning opportunities. When interviewed about learning opportunities, employees said that they did not have many opportunities to learn anything beyond their routine work, and that they usually worked too long in the same job or on the same project to learn much that was new.

Being able to use a variety of skills and talents in one's job, and to exercise both physical and mental faculties, makes work interesting and gives scope to creativity. Question 16 (Table 5.37) was meant to discover whether employees in the offset companies felt able to extend themselves in this way. Again, the results show roughly two thirds satisfied and one third dissatisfied. Though a large minority was dissatisfied, it has to be borne in mind that many of the respondents, such as the security officers and clerks, do work that is inevitably routine. A crosstabulation between job title and work itself (Table 5.47) shows that workers in these job categories reported higher percentages of dissatisfaction than others. Furthermore, given that a high percentage of the respondents are graduates it is conceivable that some of them do not feel stretched by their work. A crosstabulation between qualification and work itself reveals that holders of university degrees and high degrees tended to report higher percentages of dissatisfaction than most of the other educational categories, albeit it should also be noted that they also reported slightly higher percentages of satisfaction than the other groups.

**Table 5.47: Job Title/Work Itself Crosstabulation**

		Job title * Work itself Crosstabulation					
Job title		Work itself					Total
		vdis	dis	dk	sat	vsat	
Job title	supervisor	2 4.2%	3 6.3%	5 10.4%	27 56.3%	11 22.9%	48 100.0%
	manager		3 7.0%	3 7.0%	28 65.1%	9 20.9%	43 100.0%
	engineer	3 5.2%	7 12.1%	2 3.4%	33 56.9%	13 22.4%	58 100.0%
	technician	7 6.6%	11 10.4%	20 18.9%	44 41.5%	24 22.6%	106 100.0%
	clerk	1 3.1%	5 15.6%	3 9.4%	15 46.9%	8 25.0%	32 100.0%
	security	3 20.0%	4 26.7%	2 13.3%	4 26.7%	2 13.3%	15 100.0%
	Total	16 5.3%	33 10.9%	35 11.6%	151 50.0%	67 22.2%	302 100.0%

**Table 5.48: Qualification/Work Itself Crosstabulation**

		Qualification * Work itself Crosstabulation					
Qualification		Work itself					Total
		vdis	dis	dk	sat	vsat	
Qualification	elementryschool		3 33.3%		4 44.4%	2 22.2%	9 100.0%
	intermediateschool	2 6.7%	2 6.7%	4 13.3%	15 50.0%	7 23.3%	30 100.0%
	secondarieschool	8 11.6%	6 8.7%	13 18.8%	33 47.8%	9 13.0%	69 100.0%
	diploma	3 3.8%	6 7.7%	9 11.5%	37 47.4%	23 29.5%	78 100.0%
	universitydegree	1 1.1%	12 13.6%	8 9.1%	49 55.7%	18 20.5%	88 100.0%
	highdegree	1 3.6%	4 14.3%		15 53.6%	8 28.6%	28 100.0%
	Total	15 5.0%	33 10.9%	34 11.3%	153 50.7%	67 22.2%	302 100.0%

The interviews revealed some of the causes of dissatisfaction in this area. Again there were complaints that employees were often stuck in the same job and the same department for too long and therefore became bored and jaded. One official mentioned that he did not learn from his mistakes as much as he could because directors and staff seldom came together to discuss their work. Another employee complained that his work was given to him by his direct supervisor without any reference to his own preferences or his desire to extend himself in a particular way.

A number of questions (10–14, 18–20) (Tables 5.31-5.35 and 5.39-5.41) concerned employees' freedom to work in their own way and be responsible for their own work. These questions had quite consistent results, most showing over 60 per cent satisfied and over 20 per cent dissatisfied. The interviews shed some light on the reasons for dissatisfaction. Employees frequently complained that their supervisors showed a lack of trust and interfered excessively in their work. It was also reported that employees were given set tasks and could not encroach on the work of others. Employees were not encouraged or trained to make decisions, and their suggestions were generally, though not always, dismissed. The way jobs were structured did not give much scope for independent decision-making. As one interviewee explained, the reasons for his dissatisfaction were "the inflexibility of the rules governing the job, the restrictions imposed by authorities, and routine."

A sizeable minority of respondents expressed dissatisfaction when asked in Question 17 (Table 5.38) whether they felt what they were doing was worthwhile. Again, the interviews revealed that the main reason for dissatisfaction was a sense of routine. In interpreting the results, however, it has to be remembered that the very nature of the jobs of some of the respondents (e.g. the clerks and security officers) allows them little scope for individual initiative in carrying out their duties. (Refer again to Table 5.47.)

Overlapping responsibilities between employees in any department can create confusion and can lead to conflict. However, if employees are restricted too rigidly to their own individual tasks they can lose a sense of involvement in a larger project. The results of Question 15 (Table 5.36) with 21 per cent showing different degrees of dissatisfaction, suggest that the offset company employees sometimes feel this restriction. In the interviews, some respondents reiterated that they had few opportunities to be



responsible for the work of the others. It was also said that they were not given the chance to comment on the performance of co-workers. One reason for the strict division of labour in the offset companies is that they deal with high-tech systems where there is a need for specialised expertise, and hence there is little room for the sharing of tasks.

Questions 22 and 23 (Tables 5.43 and 5.44) produced similar results with 70 per cent satisfied or very satisfied, thus showing respondents to be generally content with their work and responsibilities. However, the interviews revealed a number of respondents who felt that their jobs did not suit their qualifications or backgrounds. Some found that their job title did not match the work they performed, and others that the work was mainly administrative and did not make use of their academic training. (Refer again to Table 5.48.) Typical comments were: "I am dissatisfied with my job because my work can be done by a less qualified employee so I could carry out more sophisticated duties"; "I am very much concerned to do my work with care despite the feeling that my years of study have been wasted because I have been unable to relate my academic achievement to practical experience"; and "I am not satisfied because of the contradiction between my specialisation and my job"; and "My field is academic while my job is administrative."

Question 24 (Table 5.45) showed that the majority were satisfied that their jobs were not too difficult, though, as previously mentioned, many interviewees found fault with their supervision or management.

The last question in this section, Question 25 (Table 5.46), asked whether, all in all, respondents were satisfied with the actual work that they were called on to do. With 50 percent satisfied and 22.2 percent very satisfied, it would appear that, despite various

criticisms, a substantial majority of respondents were content with the nature of their work. As the crosstabulations in Tables 5.47 and 5.48 showed, there were some variations in the results according to differences in job title and educational attainment, with the former being more apparently conclusive than the latter. Significantly, employees who worked as technicians, the largest job category group in the sample, were found to be more satisfied than those in other job categories.

As the researcher observed in Chapter Three, many theorists (including Locke, 1965; Vroom, 1964; Herzberg, 1966 and 1993; Hackman and Lawler, 1971; Hackman and Oldham 1976; Gruneberg, 1979; and others) have associated job satisfaction and the nature of an employee's work itself. A considerable number of empirical studies (Kiely, 1986; Freeborn and Hooker 1995; Dekker, Barling, & Kelloway, 1996; and others) have been conducted and have lent support to the association. In order to determine whether or not overall satisfaction and satisfaction with work itself were significantly related in the context of the offset companies, the researcher generated the following hypothesis and null hypothesis:

H 2.1 There is a significant relationship between the respondent's general satisfaction with work itself and the degree of job satisfaction.

H 0 2.1 There is no significant relationship between the respondent's general satisfaction with work itself and the degree of job satisfaction.

A Spearman Correlation Coefficient Two-Tailed Test was then performed, and the researcher found a significance of .619, which is highly significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between

respondent's general satisfaction with the work itself and the degree of job satisfaction was rejected.

The assertion that satisfaction with the work itself has played a significant positive role in the construction of a high overall level of job satisfaction in the offset companies is supported by the data obtained for every one of the individual questions in this section. In all seventeen cases, a clear majority of respondents expressed that they were either satisfied or very satisfied with the job characteristic being examined. Although some workers, particularly in the lower ranking job categories expressed dissatisfaction with training, autonomy and task variety, the overall impression is that around two-thirds of workers are satisfied in most areas of work itself.

The researcher would observe at this point that he believes that many of the workers are aware of, and experience some fulfilment as a result of the fact that, working in the offset companies places them at the forefront of Saudi Arabia's future development plans. There are many young Saudis who look forward to working in an environment in which they can practice high technology skills and utilise some of the most advanced equipment in the world.

This is not to say that there is no room for improvement in this area. One official described the situation as follows: "the routine in work and the irregular meetings between directors and their staff to enable them to recognise their mistakes are among the negative sides in administration. An employee should, from time to time, move from one department to another to avoid the feeling of boredom and learn new methods. The promotion system should be reviewed to consider discipline in the first place,

qualifications, and finally years of experience so the active can not be equated with the neglectful employee.”

5.4.2 Pay

The section dealing with the importance of pay as it relates to job satisfaction included four questions. Each of the first three items was concerned with different ways in which an employee could view his level of pay, while the final question in the section asked about overall satisfaction with pay.

The responses to this section of the questionnaire were as follows:

Table and Chart 5.49: The amount of pay for the work I do

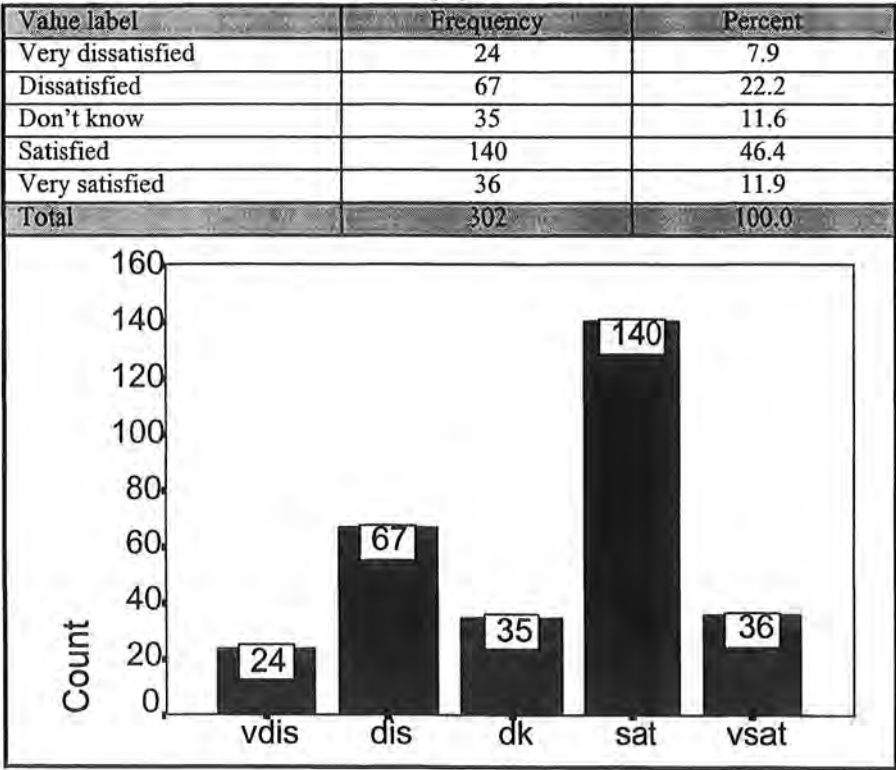


Table and Chart 5.50: My pay and the amount of work I do

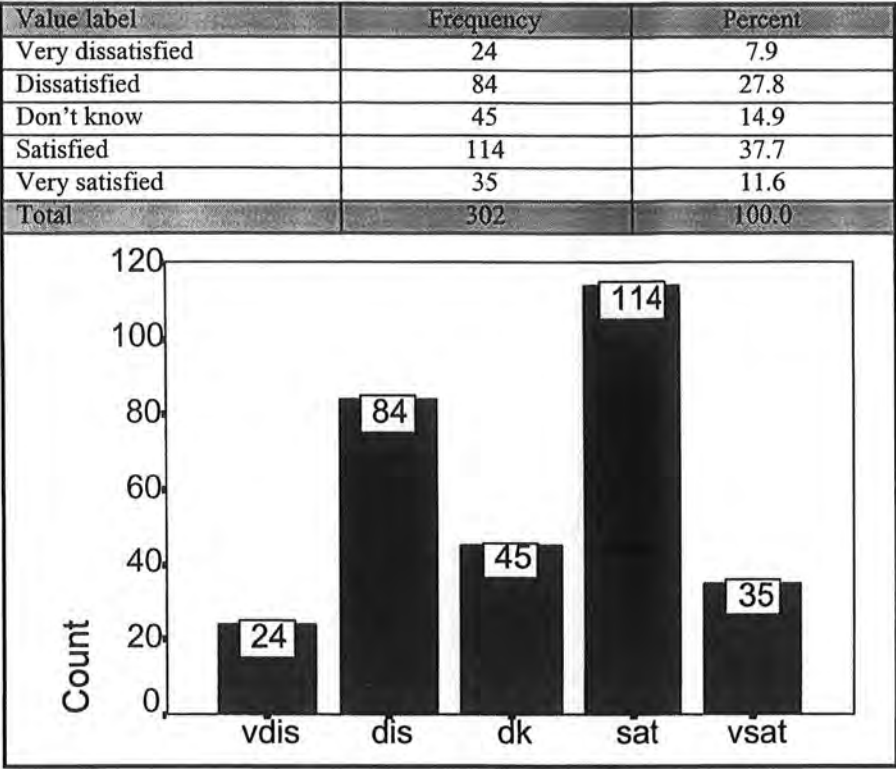
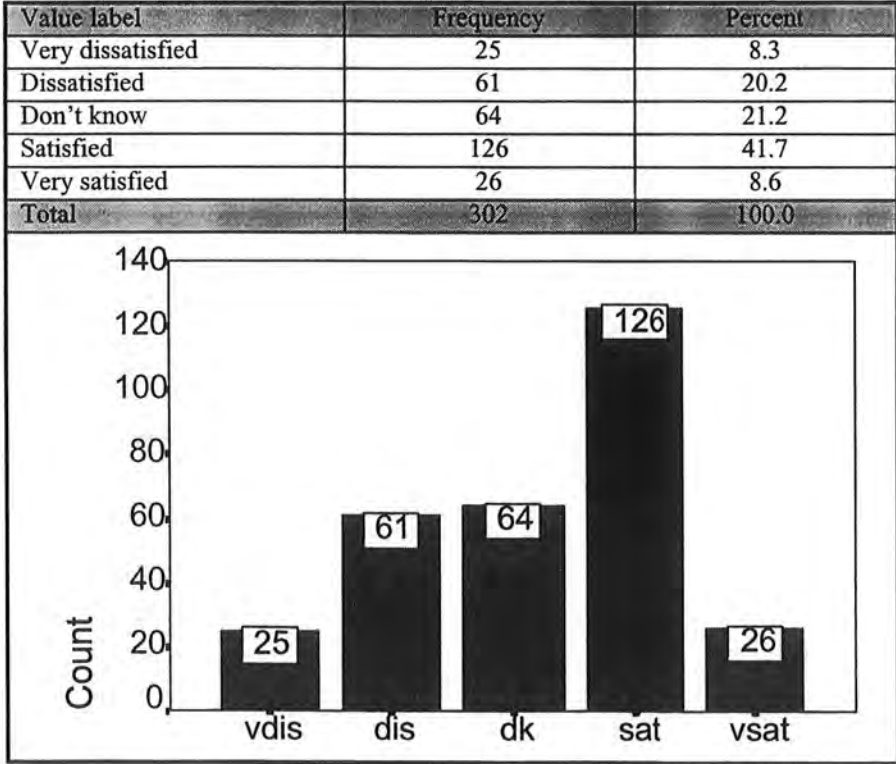
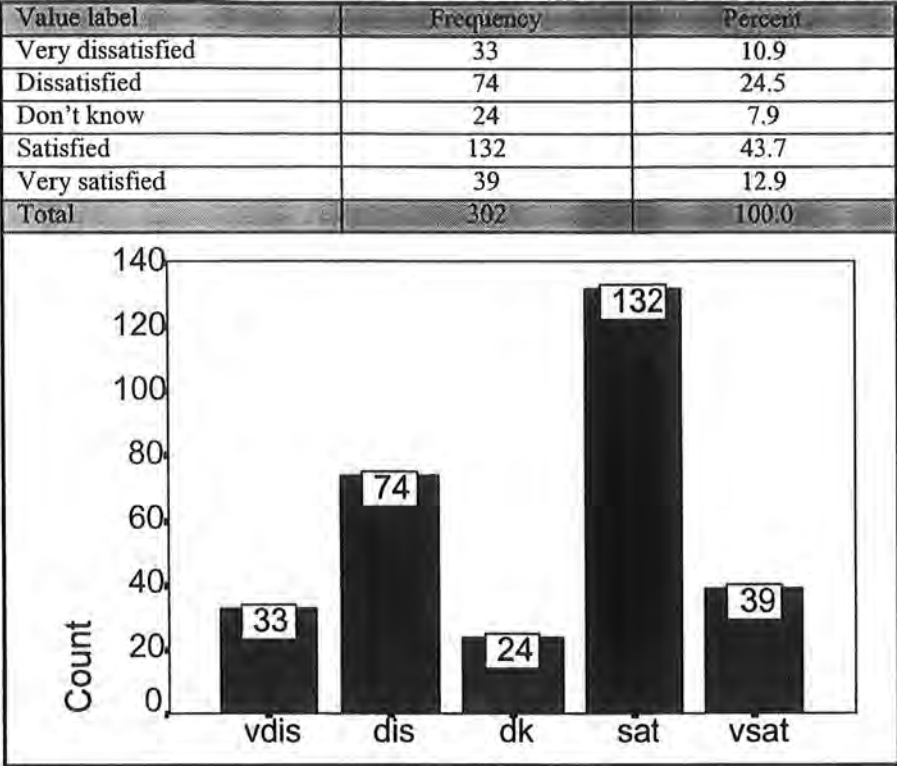


Table and Chart 5.51: My pay and fulfilment of my personal needs



**Table and Chart 5.52: All in all, to what extent are you satisfied with your pay?**



Regarding the degree of satisfaction with pay in relation to the amount of work required (Question 26/Table 5.49 and Question 27/Table 5.50), well over half were satisfied but a significant minority of about a third were not. When interviewed, some respondents said they worked excessively for the money they received, and sometimes (as one employee claimed) did the work of two or three people. A contrary view, however, was expressed by some who, aware of the Islamic requirement that there should be a fair balance between work and rewards, felt some guilt that they were not required to work hard enough for their money.

In response to Question 28 (Table 5.51) about whether their pay fulfilled their personal needs, however, only a small majority expressed satisfaction, with over 8 percent very dissatisfied, over 20 percent dissatisfied and a further 20 percent uncertain. In interviews, married employees in particular complained of the financial obligations involved in having families, although a crosstabulation of marital status and pay reveals

that there is not a particularly clear separation between married employees and single employees on the subject of pay overall.

**Table 5.53: Marital Status/Pay Crosstabulation**

		Marital status * Pay Crosstabulation				
		Pay				
		vdis	dis	dk	sat	vsat
Marital status	married	24 11.4%	49 23.3%	14 6.7%	97 46.2%	26 12.4%
	single	9 9.8%	25 27.2%	10 10.9%	35 38.0%	13 14.1%
Total		33 10.9%	74 24.5%	24 7.9%	132 43.7%	39 12.9%
						210 100.0%
						92 100.0%
						302 100.0%

Responses to the question about overall satisfaction with pay (Question 29/Table 5.52) were consistent with answers to the preceding questions, with a majority of 56.6 percent reporting that they were either satisfied or very satisfied, while 35.4 percent were either very dissatisfied or dissatisfied, and a further 7.9 percent were uncertain. Crosstabulations between age and pay, qualifications and pay and job title and pay show that satisfaction levels are broadly similar across most age, qualification and job category groups, with majorities in virtually every group (except security guards) expressing satisfaction with pay, but with substantial minorities of around 30 percent or better expressing dissatisfaction.

**Table 5.54: Age/Pay Crosstabulation**

		Age * Pay Crosstabulation				
		Pay				
		vdis	dis	dk	sat	vsat
Age	18-25	6 9.8%	12 19.7%	5 8.2%	29 47.5%	9 14.8%
	26-35	22 12.4%	43 24.2%	15 8.4%	78 43.8%	20 11.2%
	36-45	5 9.3%	15 27.8%	4 7.4%	21 38.9%	9 16.7%
	46-55		4 44.4%		4 44.4%	1 11.1%
	Total	33 10.9%	74 24.5%	24 7.9%	132 43.7%	39 12.9%
						61 100.0%
						178 100.0%
						54 100.0%
						9 100.0%

**Table 5.55 Qualification/Pay Crosstabulation**

		Qualification * Pay Crosstabulation					
Qualification		Pay					Total
		vdis	dis	dk	sat	vsat	
elementryschool		2	2		4	1	9
		22.2%	22.2%		44.4%	11.1%	100.0%
	intermediateschool	6	6	3	11	4	30
		20.0%	20.0%	10.0%	36.7%	13.3%	100.0%
	secondarieschool	8	17	8	27	9	69
		11.6%	24.6%	11.6%	39.1%	13.0%	100.0%
	diploma	7	15	6	35	15	78
universitydegree		9.0%	19.2%	7.7%	44.9%	19.2%	100.0%
		6	29	6	41	6	88
		6.8%	33.0%	6.8%	46.6%	6.8%	100.0%
highdegree		4	5	1	14	4	28
		14.3%	17.9%	3.6%	50.0%	14.3%	100.0%
Total		33	74	24	132	39	302
		10.9%	24.5%	7.9%	43.7%	12.9%	100.0%

**Table 5.56 Job Title/Pay Crosstabulation**

		Job title * Pay Crosstabulation					
Job title		Pay					Total
		vdis	dis	dk	sat	vsat	
supervisor		6	12	5	21	4	48
		12.5%	25.0%	10.4%	43.8%	8.3%	100.0%
	manager		15	3	21	4	43
			34.9%	7.0%	48.8%	9.3%	100.0%
	engineer	8	13	4	25	8	58
		13.8%	22.4%	6.9%	43.1%	13.8%	100.0%
	technician	16	19	9	46	16	106
clerk		15.1%	17.9%	8.5%	43.4%	15.1%	100.0%
		1	11	1	15	4	32
		3.1%	34.4%	3.1%	46.9%	12.5%	100.0%
security		2	4	2	4	3	15
		13.3%	26.7%	13.3%	26.7%	20.0%	100.0%
Total		33	74	24	132	39	302
		10.9%	24.5%	7.9%	43.7%	12.9%	100.0%

Further insights into attitudes to pay emerged in the interviews. Some employees thought they deserved a higher salary on account of their qualifications. (Note that Table 5.55 shows that university degree holders expressed the most dissatisfaction.) Some workers compared themselves to expatriate employees, whose salaries and other incentives were much higher than theirs. Others complained that their pay did not keep pace with inflation. On the other hand, it was recognised by some respondents that salaries in the offset companies were better than in the Saudi public sector and sometimes better than in other private companies. On the issue of pay, one employee



said: "I believe that job satisfaction is connected to self-motivation and understanding. In our case, frustration for external reasons such as financial reasons might affect self-motivation, and this, in turn, might jeopardise job performance and the communication between different departments and fields of expertise." Another employee commented: "Pleasing everyone is not possible. In a large establishment such as the economic offset companies, directors may be unaware of one individual's effort, which might therefore go unappreciated. Employees should feel satisfied in their conscience without expecting any extra rewards. On the other hand, rewarding dedicated staff normally increases their effort and work motivation."

As the researcher explained in Chapter Three, pay is considered by many scholars as a primary motive for work and as a factor that plays an important role in life satisfaction generally and in work satisfaction particularly (Lawler, 1973; Gruneberg, 1979; Locke 1984; Meek, 1998; Nelson, 1994). However, other scholars while acknowledging the importance of pay have commented that it is difficult to establish a direct relationship between it and job satisfaction (Schultz, 1978; and Armstrong, 1988). It may be recalled that, for Herzberg (1959 and 1993) pay was seen as hygiene factor that did not contribute to satisfaction and could only contribute to dissatisfaction if it was not deemed sufficient by employees.

In order to test the significance of pay in relation to overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H 2.2 There is a significant relationship between the respondent's general satisfaction with pay and the degree of job satisfaction.

H 0 2.2 There is no significant relationship between the respondent's general satisfaction with pay and the degree of job satisfaction.

A Spearman Correlation Coefficient Two-Tailed Test was performed, and the researcher found that the significance was .356, which is highly significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between respondent's general satisfaction with pay and the degree of job satisfaction was rejected.

Looking at the responses for this section of the research questionnaire as a whole, the researcher feels that they tend to support the finding of the Spearman test for the significance of pay relative to the high level of overall satisfaction. As with work itself, a majority of respondents for each question expressed satisfaction. The majorities were not as high as they were for work itself, particularly with respect to Question 28 about the extent to which pay fulfilled personal needs, but this is in keeping with the higher correlation coefficient for work itself.

The researcher would, however, reiterate that roughly a third of all respondents reported being either dissatisfied or very dissatisfied with respect to every question in this section, so pay is clearly an area where there is room for improvement for the offset companies.

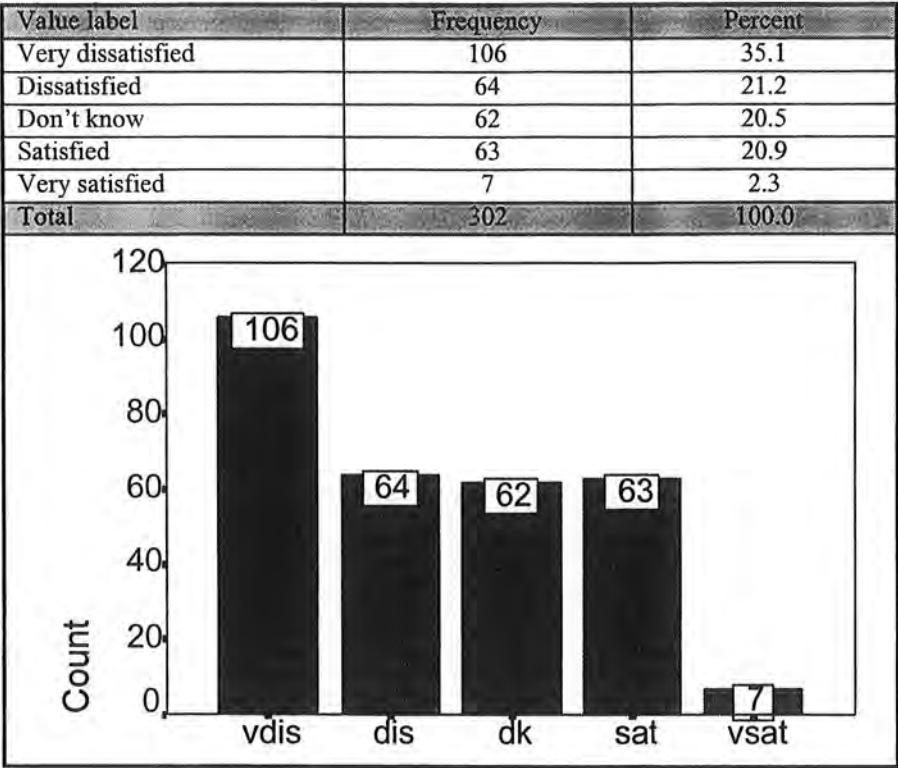
#### **5.4.3 Job Benefits**

The particular benefits specified in this section of the questionnaire are pensions, holidays, medical care, catering, job security, leisure activities and free time. The main

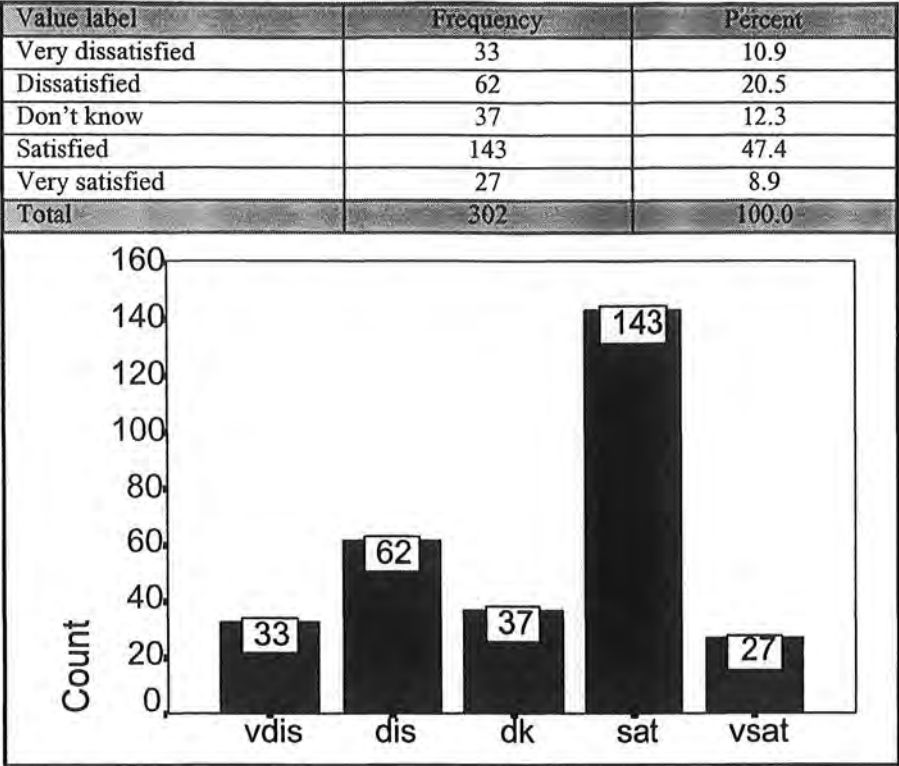
question in the section was the final one, which focused on the overall level of satisfaction with all the benefits taken together.

The responses for this section of the questionnaire were as follows:

**Table and Chart: 5.57 The pension scheme**



**Table and Chart 5.58: The holiday system**



**Table and Chart: 5.59 Medical services**

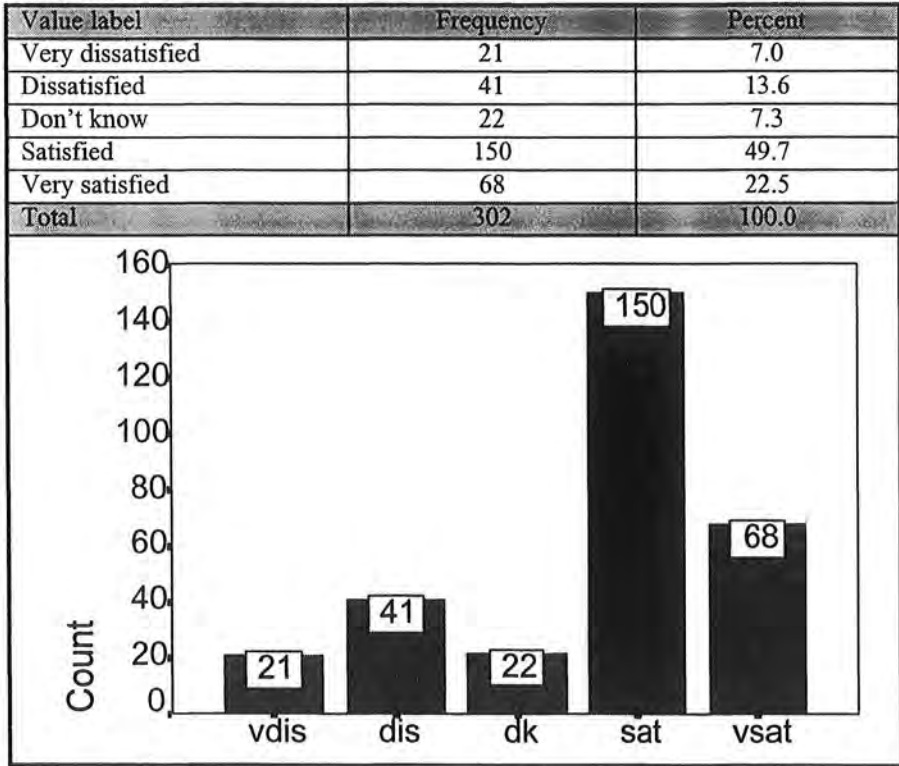


Table and Chart 5.60: Catering services

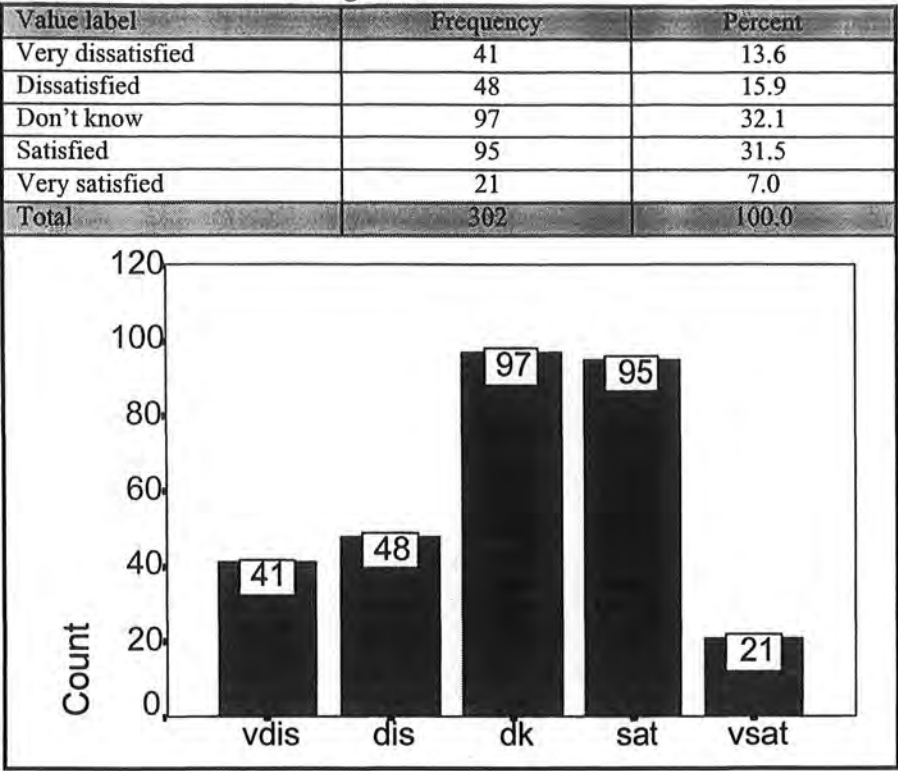


Table and Chart 5.61: The way my job provides for a secure future

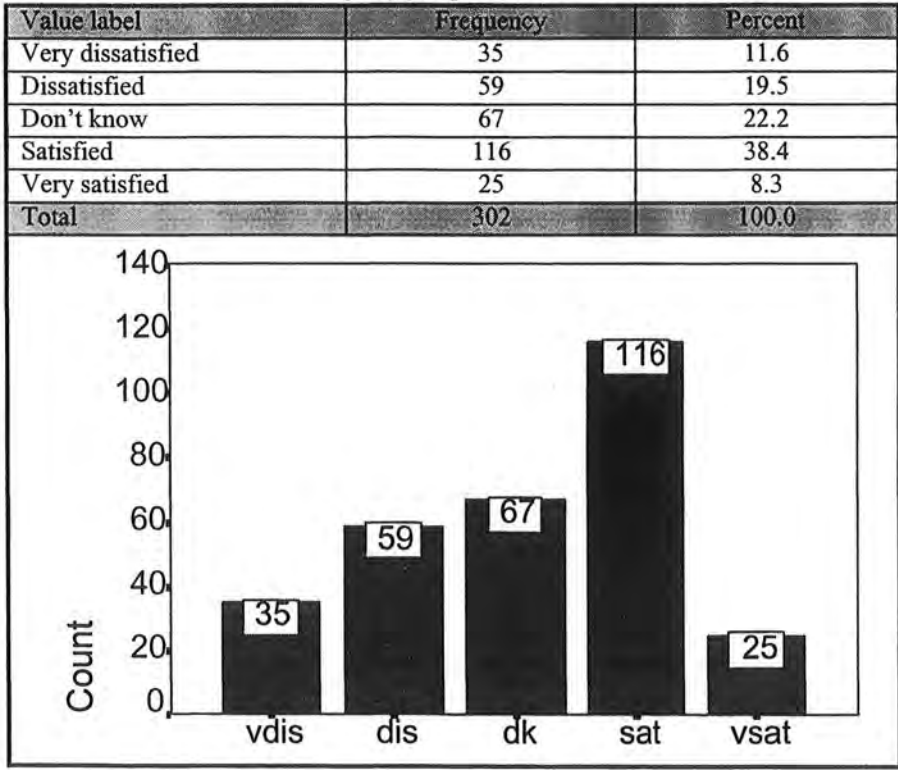


Table and Chart 5.62: The way my job provides for steady employment

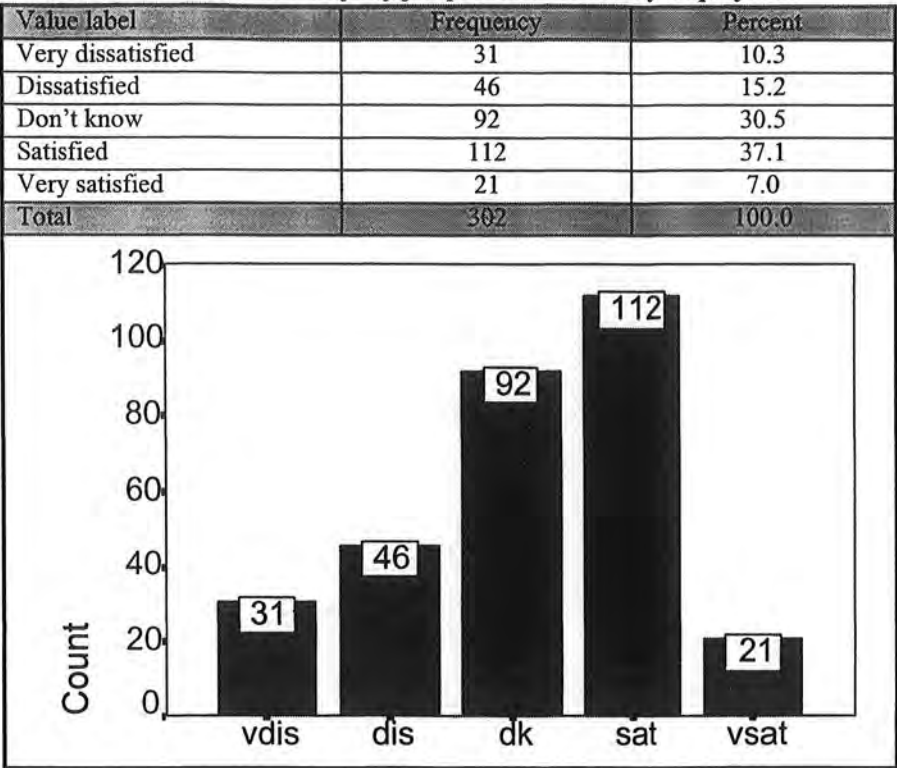


Table and Chart 5.63: Entertainment for me and for my family

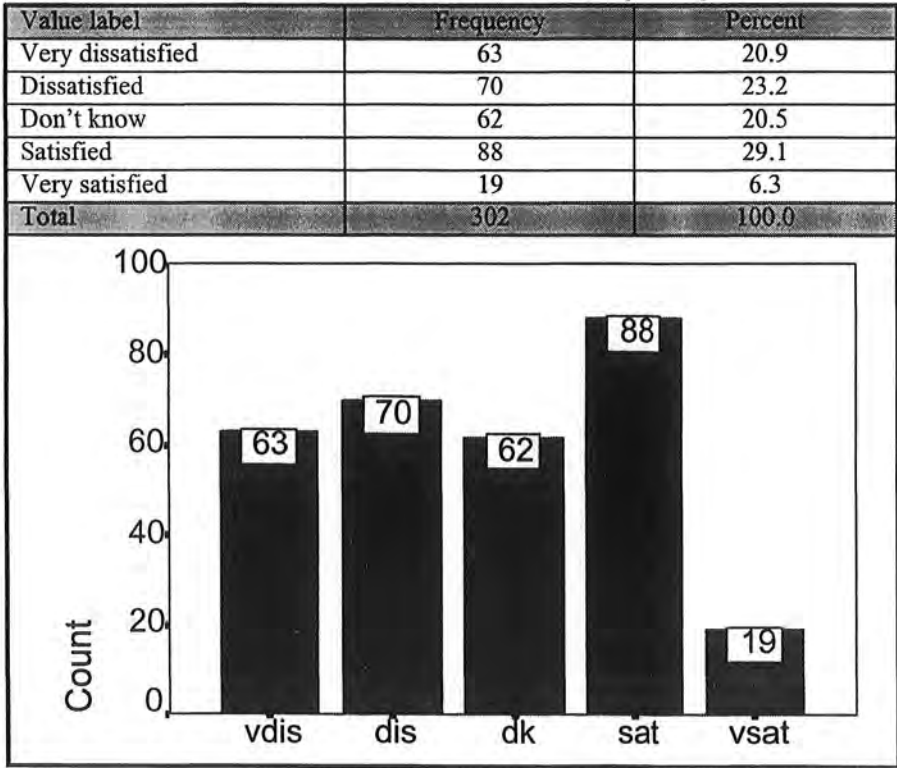


Table and Chart 5.64 The amount of time my job allows me to be with my family

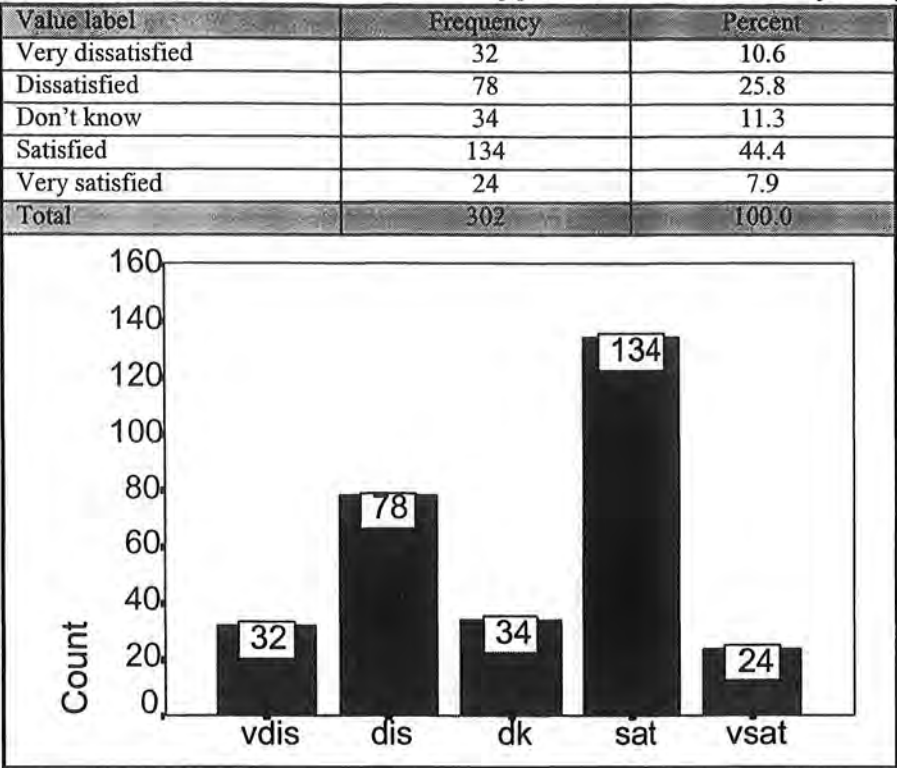
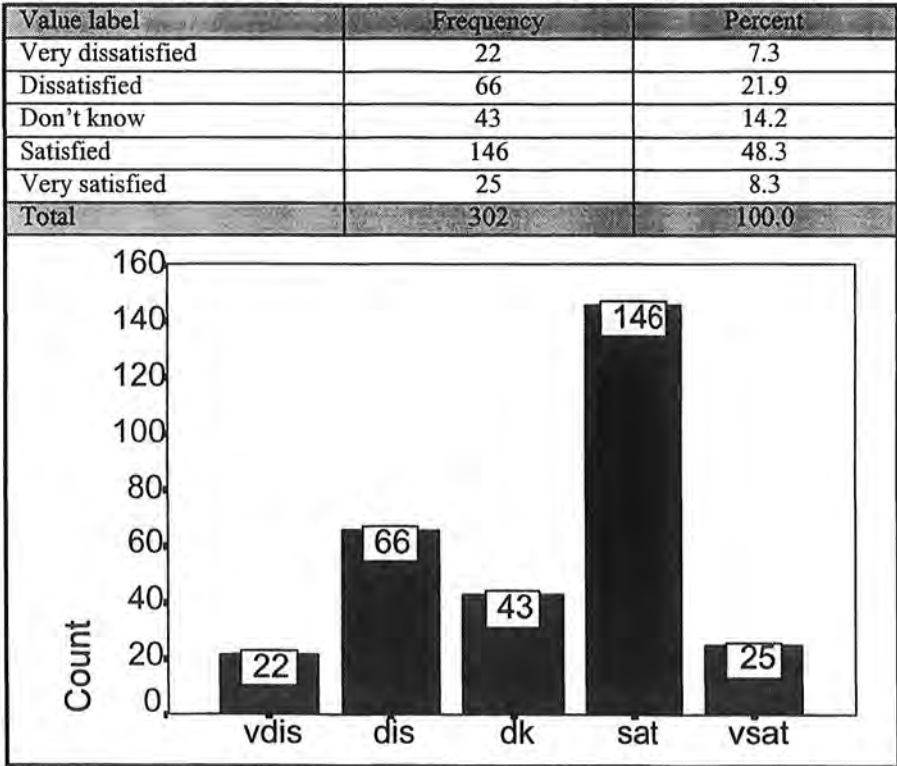


Table and Chart 5.65 All in all, to what extent are you satisfied with the job benefits?



The response to Question 30 (Table 5.57) revealed that a large majority of employees were unhappy about their pension scheme. This result requires an explanation, and the interviews provided a partial if not a complete one. What emerged from talking to

employees face-to-face was a high level of ignorance and incomprehension on the subject of pensions. The following remarks were made by different respondents: "I do not understand the system at all"; "I do not think the system is clear or fair towards employees"; and "The system is not available for every body to look at, so most of the employees do not really have any basic knowledge about it." The researcher conducted further enquiries and must report that it does appear that the companies do not distribute information or instructions about their pension schemes. It should also be noted that the workers interviewed reported a general impression that pensions in the public sector were better than those in the private sector. The question about pensions was different from all the others in asking the respondents to look beyond the present to what, for many, was the far distant future. The researcher felt that, while they found it simple to assess things like their current pay, many employees perhaps found it difficult to assess something that they would only receive once they had retired.

Although the responses to Question 31 (Table 5.58) showed that a majority of a little more than half found the holiday allowance in the Offset Companies sufficient, in the interviews many respondents complained about the lack of holidays and the rigid system by which holiday times are allocated. Generally private holidays are fixed at 22 days, and, in addition to the off-day every Friday, there are only two official holidays (Aid Adha and Aid Ramadan).

A substantial majority of over 70 per cent were either satisfied or very satisfied with the medical services provided by the offset companies (Question 32/Table 5.59). This, by some considerable margin, is the benefit that was most widely approved of by respondents.



Over half the respondents were neutral or dissatisfied with the catering services (Question 33/Table 5.60). Those who were interviewed complained about both the quantity and quality of the food that was served, saying it was not nutritious or healthy and was too expensive. A high percentage of the respondents were undecided, which might be explained by the fact that a considerable number of employees do not think that the issue is of any significance. As one employee commented in an interview: "I don't care about this issue. It is not very important to me to have tea or coffee in the work places. What concerns me are the important issues such as promotion or recognition from my supervisor."

Questions 34 and 35 (Tables 5.61 and 5.62) produced comparable results showing that less than half of the respondents felt confident about their future and their job security. Some of those who were interviewed said they could be sacked for committing quite minor mistakes. They also thought employees who fell foul of their superiors were very vulnerable. They were conscious that, unlike public sector employees, they could be relocated or laid off at any time if the company required it

Large companies generally provide leisure facilities for their employees, including, for example, a good library, a good restaurant, and organised tours inside and outside the country. The responses to Question 36 (Table 5.63) on this issue showed respondents to be even more critical of the companies' leisure provisions than of their catering, with 44.1 percent dissatisfied and another 20.5 percent uncertain, leaving only about a third of employees satisfied or very satisfied. Interviewees complained that there were no entertainment clubs, and that there were only once- or twice-yearly social occasions with senior management.

Only half the respondents were satisfied with their everyday working hours (Question 37/Table 5.64) and a third were not satisfied – a result which is even more critical of the companies' policy than in the case of holiday provision. Interviewees could not help comparing their situation with that of government employees: the latter work from 7.30 am to 2.30 pm five days a week, whereas offset company employees work from 7.00 am to 3.30 pm six days a week. Saudis in general take their family obligations very seriously, but many respondents said they did not have time for such duties as taking children to school or visiting relatives.

As the above data and comments show, respondents' attitudes varied greatly from one job benefit to another, and some were characterised by very low satisfaction percentages. However, the responses to Question 38 (Table 5.65) show that a majority of 56.6 percent claimed to be either satisfied or very satisfied with the offset companies' provision of benefits overall. The researcher's interviews lead him to conclude that, to at least some extent, this apparent discrepancy reflects the fact that the value that employees attach to some benefits which they are pleased with (i.e., medical care) outweighs the value that they attach to other benefits (i.e., catering facilities, entertainment, etc.) which they are not pleased with, but which they do not care so much about. Furthermore, some interview subjects indicated that they do not regard benefits, on the whole, as being as important as other factors such as pay and promotions. Employees who felt like this might have been inclined to express general satisfaction in this area even if they were dissatisfied or uncertain about the specific aspects they were asked to comment on, simply because the lack of benefits in some areas does not bother them very much.

It is interesting to note that a crosstabulation of job title and benefits indicates that, on the whole, the higher ranking employees expressed generally higher percentages of satisfaction while the lower ranking employees expressed higher levels of outright dissatisfaction. This could indicate that some aspects of the benefits structure favour employees in ranking positions, and that lower ranking employees resent this, or it could simply reflect the fact that some of the benefits (catering facilities, entertainment, and such) are simply not as important to higher ranking employees. The researcher suspects that the difference has much to do with benefits such as job security, which the higher ranking employees are perceived to have more control over. In interviews about the job security issue, workers frequently commented that they were dissatisfied with the fact that their superiors could dismiss them for little or no reason.

**Table 5.66: Job Title/Job Benefits Crosstabulation**

Job title * Job benefits Crosstabulation							
		Job benefits					Total
		vdis	dis	dk	sat	vsat	
Job title	supervisor	2 4.2%	9 18.8%	6 12.5%	27 56.3%	4 8.3%	48 100.0%
	manager	1 2.3%	5 11.6%	8 18.6%	26 60.5%	3 7.0%	43 100.0%
	engineer	2 3.4%	13 22.4%	10 17.2%	29 50.0%	4 6.9%	58 100.0%
	technician	15 14.2%	23 21.7%	15 14.2%	42 39.6%	11 10.4%	106 100.0%
	clerk		10 31.3%	3 9.4%	18 56.3%	1 3.1%	32 100.0%
	security	2 13.3%	6 40.0%	1 6.7%	4 26.7%	2 13.3%	15 100.0%
	Total	22 7.3%	66 21.9%	43 14.2%	146 48.3%	25 8.3%	302 100.0%

In order to test the importance of job benefits as they relate to overall job satisfaction levels, the researcher generated the following hypothesis and null hypothesis:

H 2.3 There is a significant relationship between the respondent's general satisfaction with job benefit and the degree of job satisfaction.

H 0 2.3 There is no significant relationship between the respondent's general satisfaction with job benefit and the degree of job satisfaction.

The researcher proceeded to perform a Spearman Correlation Coefficient Two-Tailed Test, and found a significance of .483, which is highly significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between respondent's general satisfaction with job benefits and the degree of overall job satisfaction was rejected.

The data from the questionnaire responses for this section as a whole does not support the overall job satisfaction finding to the same extent, or as clearly, as the data for work itself and pay seemed to support it. Obviously, as the response to Question 38 on overall satisfaction with respect job benefits did produce a clear majority of 56.6 percent, it seems that benefits probably have contributed to a high level of overall satisfaction to some extent. However, the overall percentage of dissatisfied or very dissatisfied workers was also fairly high (29.2 percent), and perhaps more tellingly, the workers expressed a majority percentage of dissatisfaction with the pension scheme, and substantial levels of either dissatisfaction or uncertainty in virtually every other area except medical services. As the researcher indicated, there are a number of different possible explanations for the seeming discrepancy between the overall figure and figures for the individual questions. For example, the importance of medical benefits probably outweighs the importance of many of the other benefit areas for most workers, and the importance of other factors such as pay and promotions seems to have outweighed the importance of benefits for some workers, to the extent that they may have been somewhat indifferent about many of the specific benefits they were asked to comment on. However, some aspects of this factor, particularly the pension scheme and

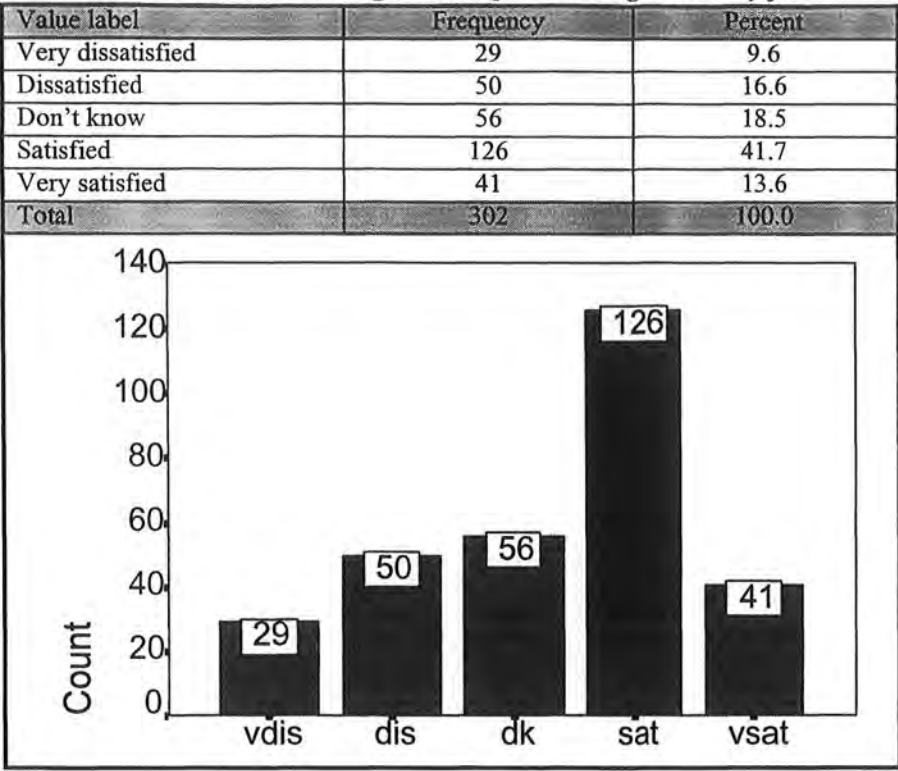
the perceived lack of job security probably require some attention on the part of the offset companies' respective administrations.

#### **5.4.4 Recognition**

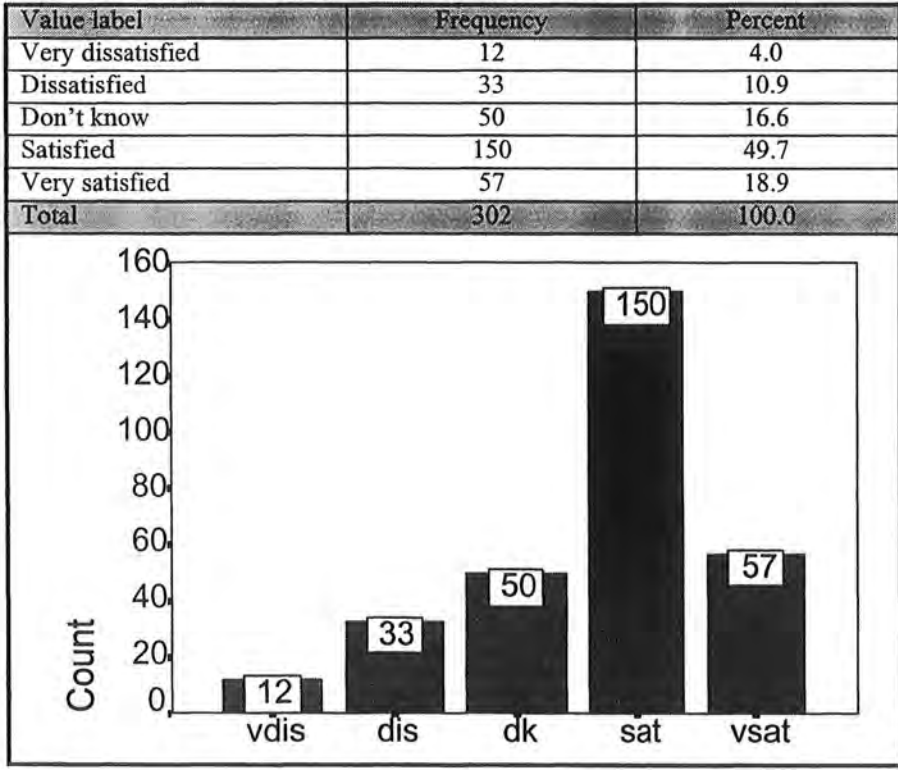
This section is concerned with the recognition that employees generally expect to receive in the workplace for work well done. Recognition can, of course, be seen as being related to several or even all the job factors that construct the overall level of job satisfaction. For example, increased pay, promotions, increased job benefits, being given more autonomy or being entrusted with more responsibility in one's work, etc., can all be seen as very tangible forms of recognition for good performance at work. However, recognition also extends beyond these tangible factors to embrace a less quantifiable feeling that workers have about the extent to which their work is appreciated by their employers, supervisors and co-workers. Very often this is the product of the direct interaction that individuals in a work setting have with each other on a day-to-day basis. Six questions in the questionnaire aimed to measure different aspects of employees' level of satisfaction with this kind of recognition. A final question aimed to find out the level of overall satisfaction with recognition in general.

The responses from this section of the questionnaire were as follows:

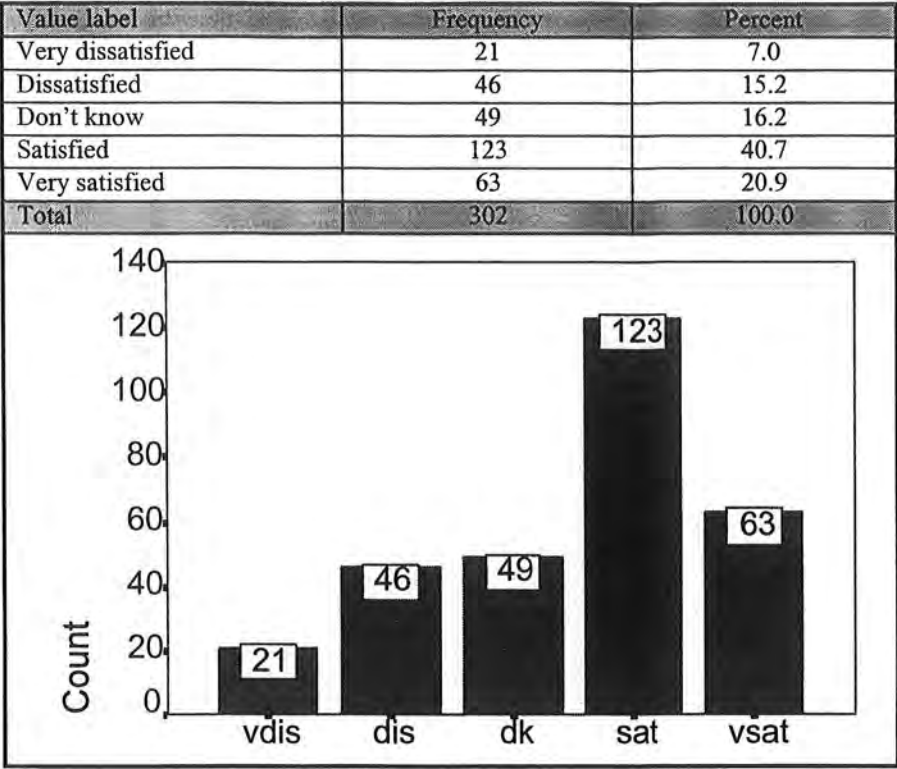
**Table and Chart 5.67: The feeling of accomplishment I get from my job**



**Table and Chart 5.68: Recognition from my co-workers**



**Table and Chart 5.69: The opportunity I have to do something that makes me feel good about myself as a person**



**Table and Chart 5.70: The way I get full credit for the work I do**

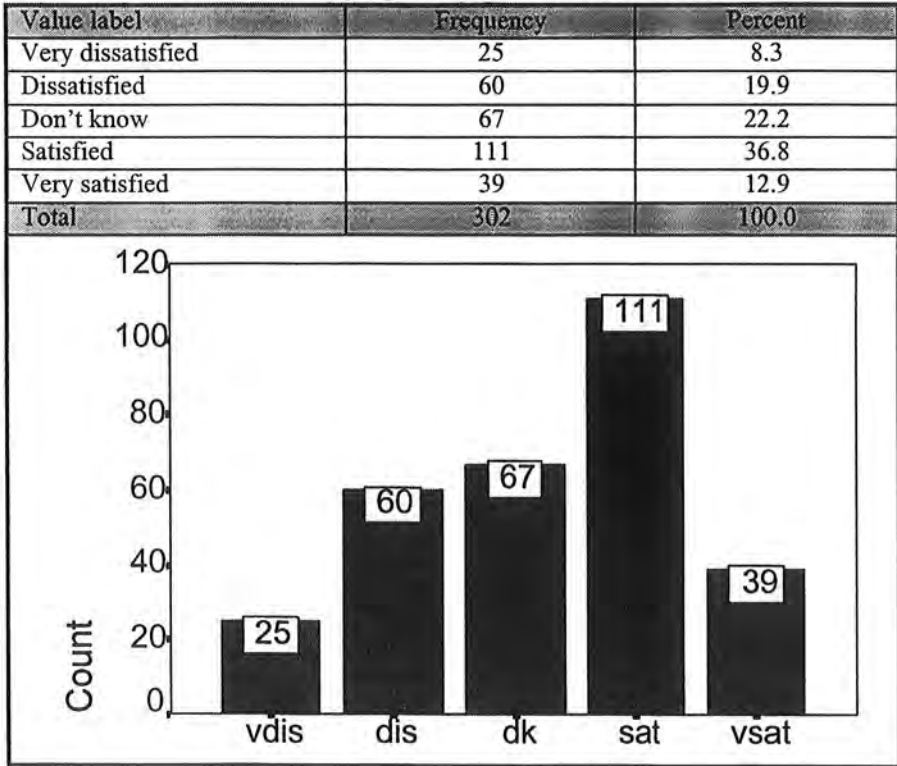


Table and Chart 5.71: The way I am noticed when I do a good job

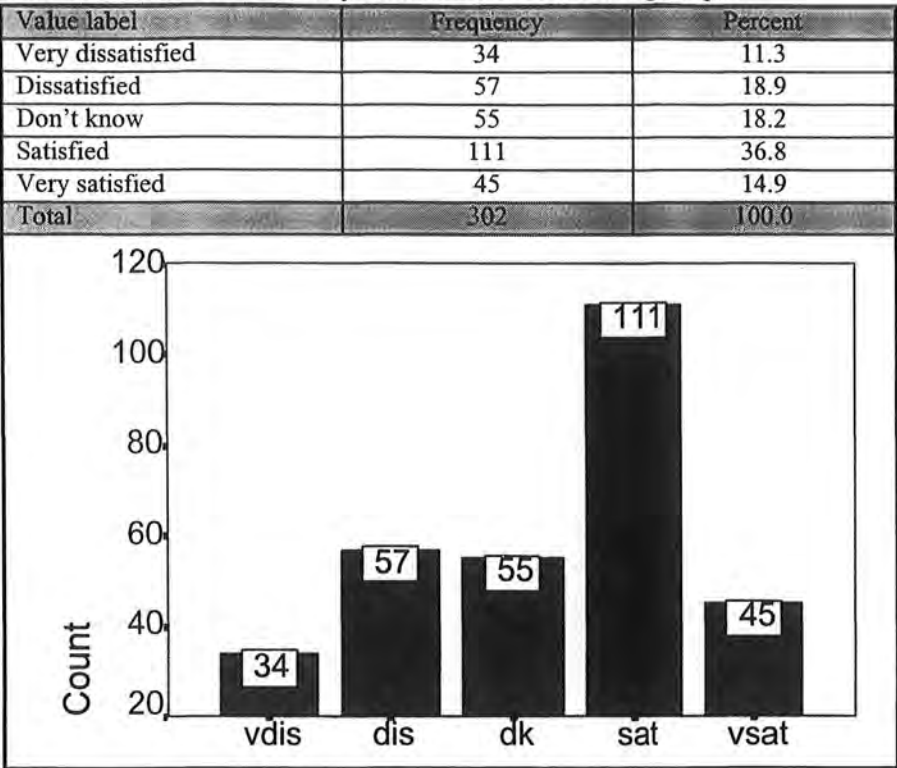
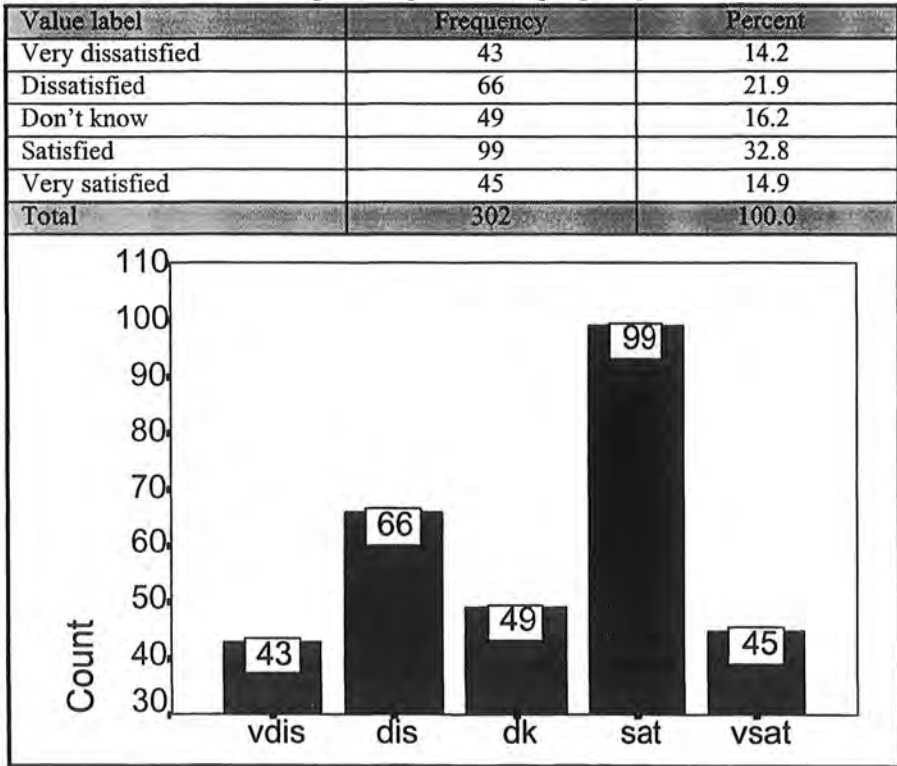
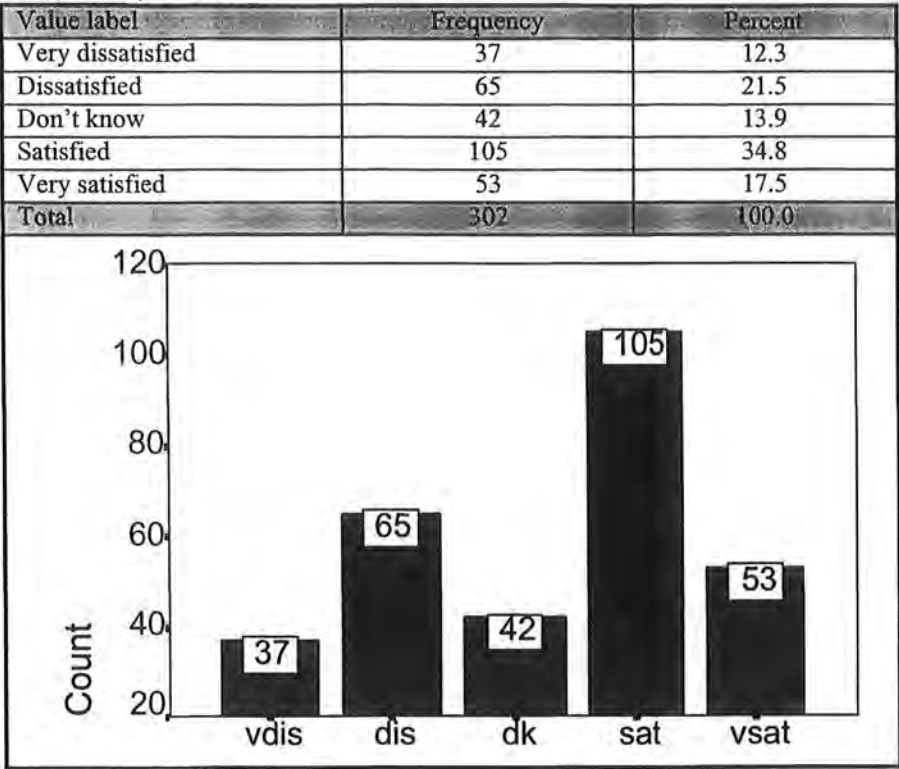


Table and Chart 5.72: The praise I get for doing a good job





**Table and Chart 5.73: All in all, to what extent are you satisfied with the recognition you receive?**



A clear majority of respondents were satisfied with the feelings of accomplishment they gained from their work and with the opportunities they had for doing work that made them feel good about themselves (Question 39/Table 5.67 and Question 41/Table 5.69). However, about a quarter were less than satisfied. In the interviews respondents were able to explain why. They said there was no expression of appreciation or encouragement from supervisors or top management. It also became clear that many were dissatisfied because they were doing routine work that they considered generally unfulfilling.

Questions 42, 43 and 44 (Tables 5.70, 5.71 and 5.72) were more specifically concerned with the employees' attitudes about the level of recognition they received from their superiors. All three questions showed that only about half the sample were satisfied or very satisfied, while in the region of a third positively said they were dissatisfied, and the remainder were neutral or uncertain. When interviewed, respondents complained

that they got no recognition from their direct managers or supervisors, or that if they did, the recognition was not given when it was needed but would perhaps be expressed by means of a certificate given for five years' work. Only in special circumstances, it appeared, would the management give praise for good performance, and when that happened workers would receive a month's or half-month's salary. One respondent complained that they sometimes got no recognition from their own company but did receive a letter of appreciation from the companies they had contracts with.

Contrasting to their responses to these questions, the results of Question 40 (Table 5.68) concerning the extent to which employees were satisfied with the recognition they received from their co-workers showed that a full 70 per cent were satisfied or very satisfied. Even though some may merely have been expressing solidarity with their fellow workers, their very different attitude towards the management raises an issue that the offset companies clearly need to address.

The responses to the final question in the section (Question 45/Table 5.73) show that a majority of 52.3 per cent of workers were either satisfied or very satisfied with recognition, while 13.9 per cent were uncertain and just over a third of the respondents (33.8 per cent) were either dissatisfied or very dissatisfied. The following crosstabulation of job title and recognition shows that workers in higher ranking positions such as supervisor and manager were considerably more satisfied with recognition overall than employees in lower positions. This is consistent with the responses to all of the questions in this section of the questionnaire, and to the supplementary interviews conducted by the researcher. Essentially it seems that the problem in this area stems from the fact that supervisors and managers in the offset companies are not doing enough to make the lower ranking employees feel that their efforts are appreciated.

They themselves seem very pleased with the recognition they receive, and are, consequently, probably not aware that there is a problem in this area for other employees.

**Table 5.74: Job Title/Recognition Crosstabulation**

Job title * Recognition Crosstabulation							
		Recognition					Total
		vdis	dis	dk	sat	vsat	
Job title	supervisor	9 18.8%	9 18.8%	4 8.3%	21 43.8%	5 10.4%	48 100.0%
	manager	2 4.7%	7 16.3%	5 11.6%	25 58.1%	4 9.3%	43 100.0%
	engineer	3 5.2%	15 25.9%	10 17.2%	17 29.3%	13 22.4%	58 100.0%
	technician	18 17.0%	22 20.8%	14 13.2%	29 27.4%	23 21.7%	106 100.0%
	clerk	1 3.1%	8 25.0%	8 25.0%	11 34.4%	4 12.5%	32 100.0%
	security	4 26.7%	4 26.7%	1 6.7%	2 13.3%	4 26.7%	15 100.0%
	Total	37 12.3%	65 21.5%	42 13.9%	105 34.8%	53 17.5%	302 100.0%

As the researcher indicated in Chapter Three, many scholars have concluded that recognition is a crucial component of overall job satisfaction (Starcevich, 1972; Locke 1976; Gruneberg 1979; Ninomiya, & Okato, 1990; Merit, 1995; Gillian, 1994). Unlike some of the other factors, such as pay and promotion, where employees tend to be satisfied with periodic rewards, most employees tend to seek some expression of appreciation from their employers, supervisors and/or co-workers on a frequent basis. Consequently, this factor may be very important in terms of helping to shape workers day-to-day attitudes.

In order to test the importance of recognition in relation to overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H 2.4 There is a significant relationship between the respondent's general satisfaction with recognition and the degree of job satisfaction.

H 0 2.4 There is no significant relationship between the respondent's general satisfaction with recognition and the degree of job satisfaction.

The researcher then performed a Spearman Correlation Coefficient Two-Tailed Test. The resulting significance was found to be .512, which is highly significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between respondent's general satisfaction with recognition and the degree of job satisfaction was rejected.

The researcher feels that the data in this section is fairly consistent with the high overall job satisfaction finding from Question 80, in that a majority of the respondents expressed satisfaction in this area. However, as the researcher found with respect to the job benefits factor, the majority was not particularly high, and the issue is not very clear-cut. Clear majorities of workers were satisfied with the feelings of accomplishment and fulfilment that they derived from their jobs, and a very high majority of the respondents felt either satisfied or very satisfied with the recognition they received from their co-workers. Although roughly half of workers expressed satisfaction in other areas, such as being given recognition or praise by superiors as a result of good performance, considerable minorities of up to a third expressed outright dissatisfaction with these aspects of recognition. A considerable number of employees indicated in interviews that they felt that their supervisors and managers did not express enough appreciation for their work, and a crosstabulation of job title and recognition showed that the respondents who were either supervisors or managers reported higher levels of satisfaction with recognition than lower ranking employees. The researcher

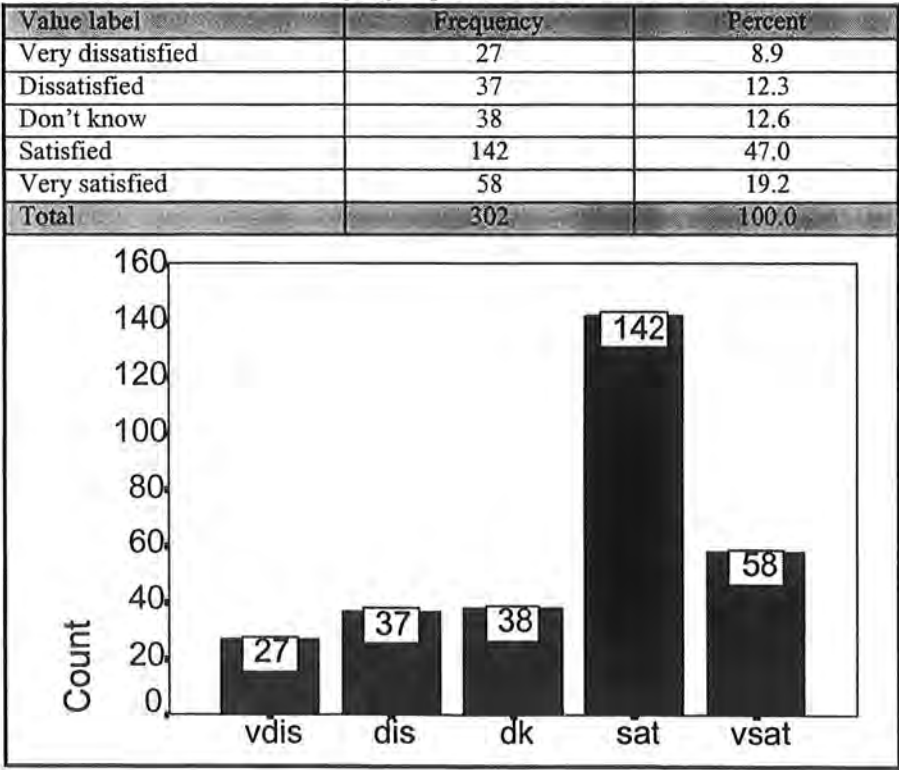
feels that, based on these results, the supervisors and managers in the offset companies should be urged to express more frequently their appreciation for the work that the employees working under them are doing.

5.4.5 Supervision

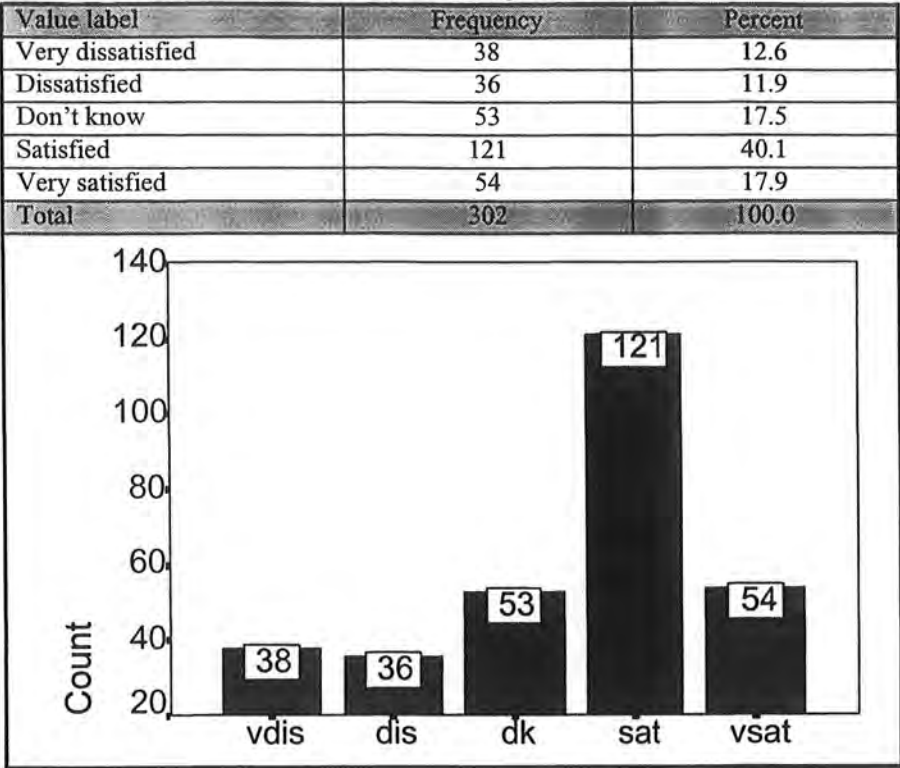
This part of the questionnaire included seven questions on different aspects of supervision in the workplace, and a final question focusing on the overall level of satisfaction with the supervision.

The responses to this section of the questionnaire were as follows:

Table and Chart 5.75: The way my supervisor and I understand each other



**Table and Chart 5.76: The way my boss delegates work to others**



**Table and Chart 5.77: The way my boss handles his employees**

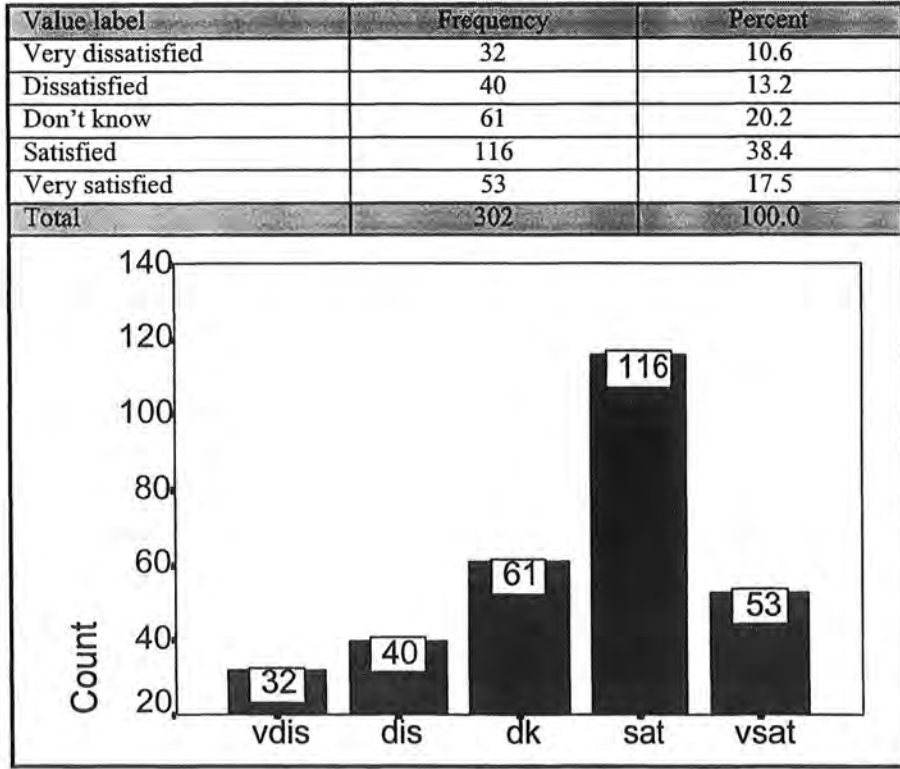


Table and Chart 5.78: The competence of my supervisor in making decisions

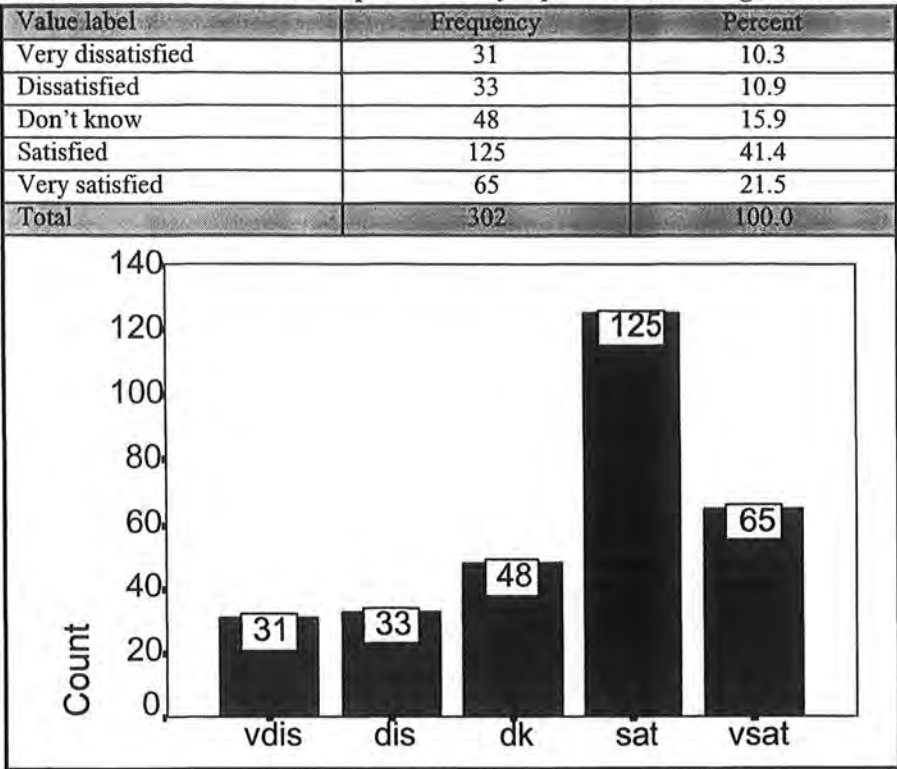


Table and Chart 5.79: The personal relationship between my boss and his employees

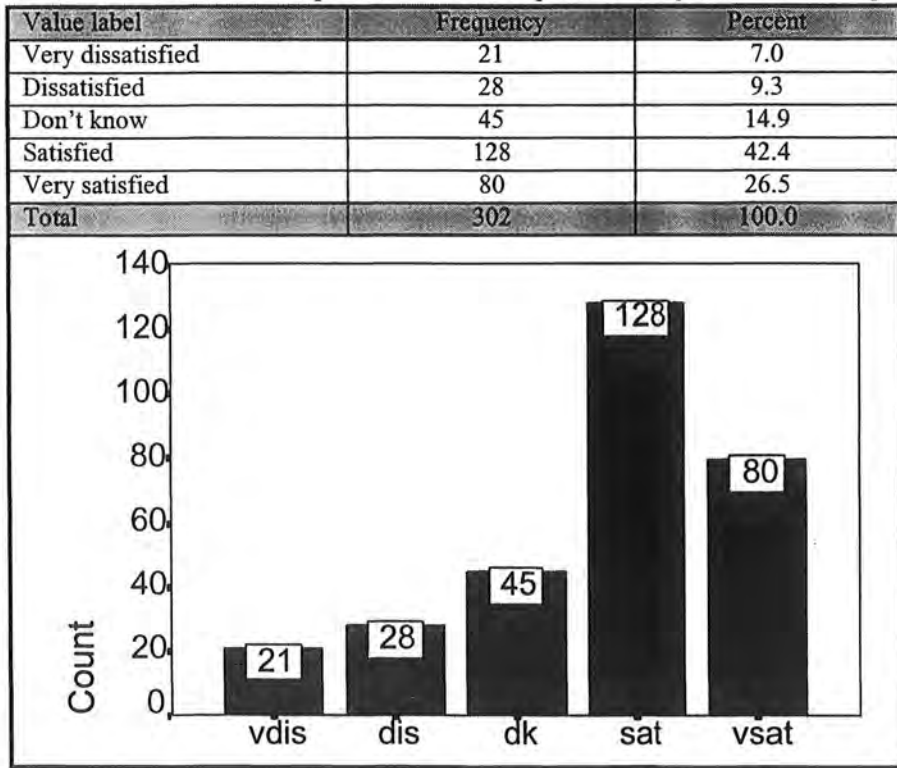


Table and Chart 5.80: The way my boss provides help on hard problems

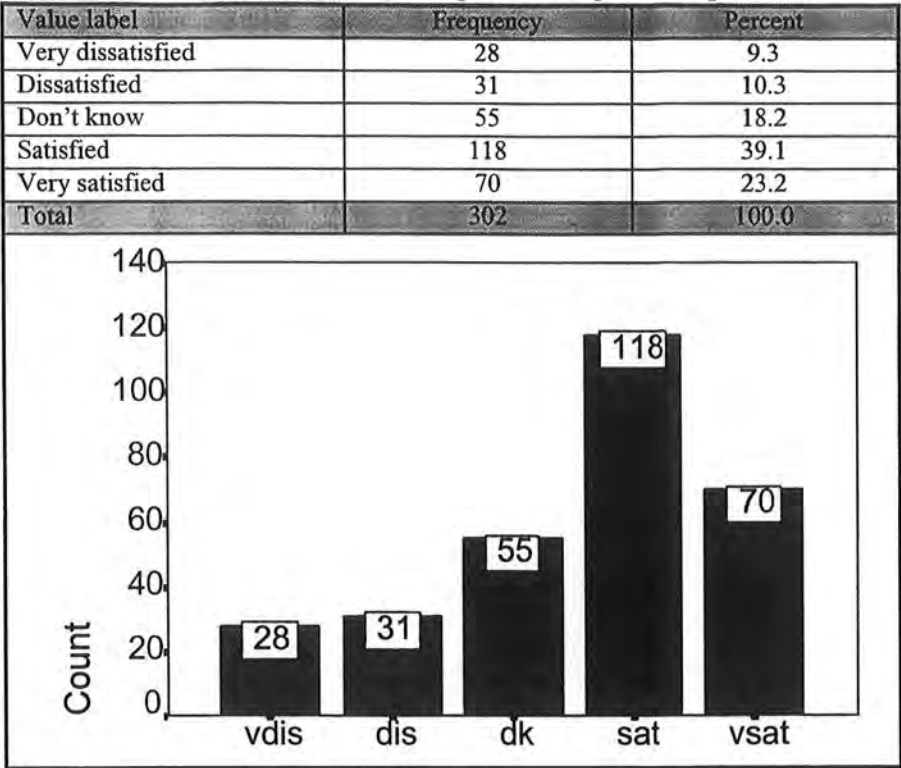
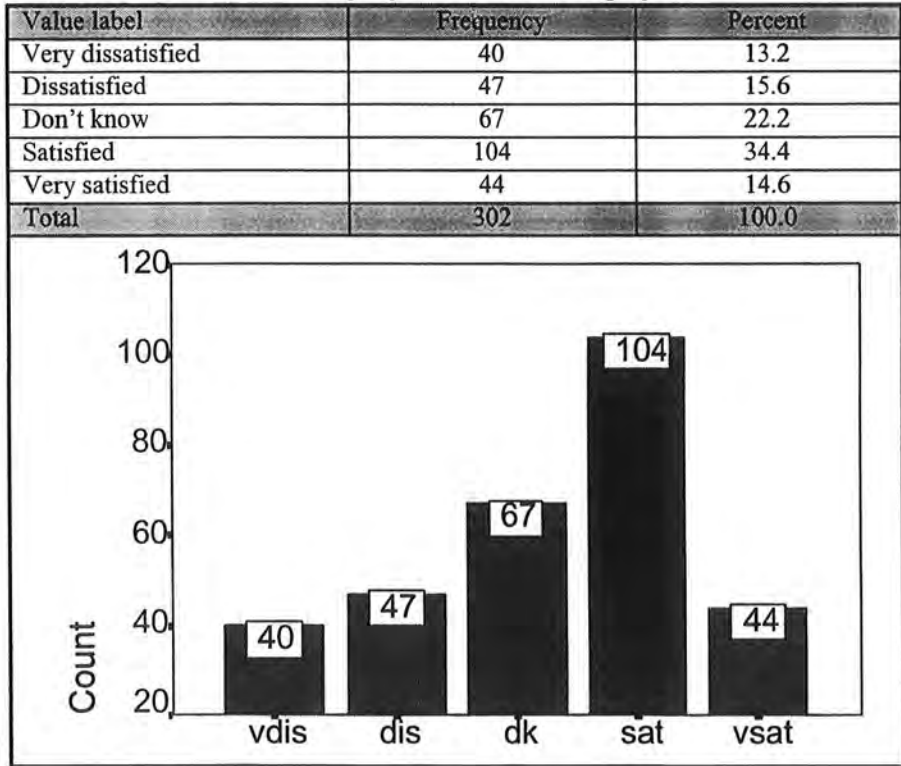
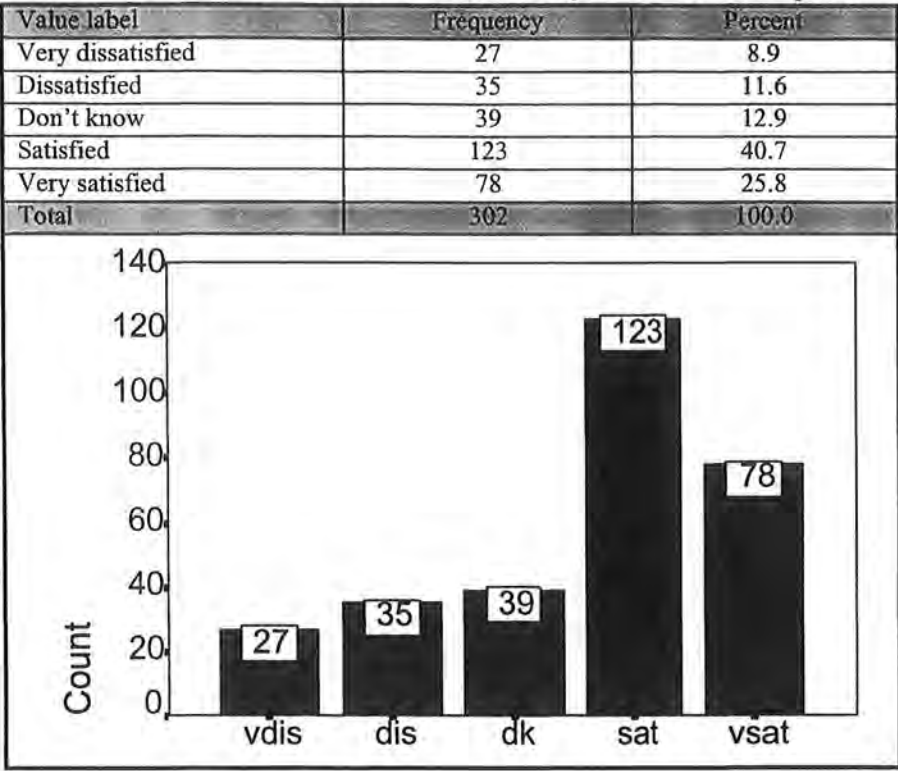


Table and Chart 5.81: The way my boss trains his employees





**Table and Chart 5.82 All in all, to what extent are you satisfied with supervision?**



Question 46 (Table 5.75) and Question 50 (Table 5.79) were concerned with the mutual understanding between employees and their supervisors. The two questions produced very similar favourable results with better than 65 percent of respondents expressing that they were either satisfied or very satisfied, and only around 20 percent of workers expressing dissatisfaction. A number of dissatisfied employees indicated in interviews that their supervisors were lacking in understanding of employees circumstances and problems. One employee noted “a lack of confidence between the director and his staff”. A few others indicated that supervisors were sometimes very high and mighty in their attitude towards employees.

Questions 47 and 48 (Tables 5.76 and 5.77) dealt with the worker’s feelings about how supervisors delegated work and handled their employees. These results were also favourable, with clear majorities of 58 percent and 55.9 percent expressing that they were satisfied or very satisfied with these aspects of supervision. However, better than

20 percent of workers were either dissatisfied or very dissatisfied in both of these areas, and around a further 20 percent of workers were uncertain. In interviews some of the dissatisfied respondents complained that their supervisors were inflexible or indecisive. Again it was expressed that supervisors sometimes came across as too high and mighty, and were too condescending in their relationships with workers.

With respect to supervisor competence (Question 49/Table 5.78) and proficiency helping workers in areas of difficulty (Question 51/Table 5.80), the results were once again quite favourable, with 62.9 percent of workers expressing that they were satisfied or very satisfied with their supervisor's competence, and 62.3 percent expressing that they were either satisfied or very satisfied with the way that their supervisors helped them with hard problems. However, better than 15 percent were uncertain in both of these areas, and around 20 percent expressed some degree of dissatisfaction. Some respondents complained in interviews that they often did not understand the instructions they were given, which made them feel uncertain of their relationship with their supervisors. Others felt that their supervisors lacked qualifications and experience. To quote one employee with very strong views: "There is growing evidence of the wrong man being placed in the wrong post, lack of career assessment, favouritism, lack of incentives, interference and greater centralism". He added that: "directors should be aware of their employees' feelings since injustice does exist in work".

The one area where the level of satisfaction was fairly low (with only 49 percent expressing some degree of satisfaction) was the way that supervisors trained their employees (Question 52/Table 5.81). 28.8 percent of employees were either dissatisfied or very dissatisfied in this area and a further 22.2 percent were uncertain. One dissatisfied interviewee said, "I believe that department directors should grant the

opportunity, equally and fairly, to all employees and not only certain ones, to attend training courses.” A number of other employees cited supervisor favouritism with respect to training as a cause of dissatisfaction. (The researcher would note that this was also one of the grievances expressed in the context of work itself.)

The responses to the question about overall satisfaction with supervision (Question 53/Table 5.82) were consistent with most of the other questions in the section. That is to say, a very substantial majority of respondents expressed satisfaction, with 40.7 percent reporting satisfaction and better than a quarter of all respondents (25.8 percent) expressing that they were very satisfied. While 12.9 percent were undecided, 20.5 percent expressed some degree of dissatisfaction.

The researcher feels that some of the responses for this section can be explained in terms of Saudi culture. A crosstabulation of age and supervision shows that older employees expressed somewhat higher percentages of satisfaction with supervision than younger employees.

**Table 5.83: Age/Supervision Crosstabulation**

		Supervision					Total
		vdis	dis	dk	sat	vsat	
Age	18-25	4 6.6%	7 11.5%	7 11.5%	26 42.6%	17 27.9%	61 100.0%
	26-35	16 9.0%	23 12.9%	27 15.2%	65 36.5%	47 26.4%	178 100.0%
	36-45	6 11.1%	5 9.3%	4 7.4%	27 50.0%	12 22.2%	54 100.0%
	46-55	1 11.1%		1 11.1%	5 55.6%	2 22.2%	9 100.0%
	Total	27 8.9%	35 11.6%	39 12.9%	123 40.7%	78 25.8%	302 100.0%

The reason for this may be that older people generally are more respected in Saudi society, as there is a religious and moral obligation to show an older person respect for their maturity. Generally speaking, the junior employee does not raise his voice against his immediate supervisor if he faces some harassment or problem, so he often submits to the situation and accepts the consequences. Supervisors may be less likely to want to antagonise older or more senior employees who are generally seen for cultural reasons as deserving more respect, and who might consequently be more influential in the workplace. Of course, the higher percentage of satisfied older employees is also at least partly explicable in terms of the correlation between age and job title. As the following crosstabulation shows, the older workers tend to be concentrated in the higher ranking positions.

**Table 5.84: Age/Job Title Crosstabulation**

Age * Job title Crosstabulation								
		Job title					Total	
		supervisor	manager	engineer	technician	clerk		security
Age	18-25	5 8.2%		8 13.1%	39 63.9%	4 6.6%	5 8.2%	61 100.0%
	26-35	31 17.4%	19 10.7%	41 23.0%	54 30.3%	24 13.5%	9 5.1%	178 100.0%
	36-45	10 18.5%	20 37.0%	7 13.0%	13 24.1%	3 5.6%	1 1.9%	54 100.0%
	46-55	2 22.2%	4 44.4%	2 22.2%		1 11.1%		9 100.0%
	Total	48 15.9%	43 14.2%	58 19.2%	106 35.1%	32 10.6%	15 5.0%	302 100.0%

As the researcher demonstrated in Chapter Three, many scholars have linked supervision and job satisfaction (Vroom, 1964; Gilmer, 1966; Locke, 1976; Bruce and Blackburn, 1992; Evans and Thomas, 1997; and Pool, 1997). Supervision style may cause either satisfaction or dissatisfaction. In other words, the supervisor who is competent, democratic, considerate to his subordinates and has a good relationship with his employees will cause a worker to have positive feelings towards his job. A

supervisor who is incompetent, personally unpleasant, too controlling or unreasonable will generate job dissatisfaction in his employees.

In order to test the importance of supervision in relation to the overall levels of satisfaction in the offset companies, the researcher generated the following hypothesis and null hypothesis:

H 2.5 There is a significant relationship between the respondent's general satisfaction with supervision and the degree of job satisfaction.

H 0 2.5 There is no significant relationship between the respondent's general satisfaction with supervision and the degree of job satisfaction.

A Spearman Correlation Coefficients two-tailed test was then performed, and the researcher found that the significance was .462, which is highly significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between the respondent's general satisfaction with the supervision and the degree of job satisfaction was rejected.

The researcher feels that the data in this area strongly and clearly supports the high overall satisfaction finding for the offset companies. With respect to the question concerning overall satisfaction with supervision a reasonably high majority of 66.5 percent of workers expressed some degree of satisfaction. Better than a quarter of all respondents (25.8 percent) indicated that they were very satisfied. For all but one of the questions in this section (the question concerning training) a clear majority of the respondents expressed some degree of satisfaction. A minority of workers expressed dissatisfaction for each of the different aspects of supervision that were tested in the

questionnaire. A variety of different complaints were voiced in interviews. The one complaint that seems to stand out is a feeling among a significant number of workers that supervisors in the offset companies show too much favouritism with respect to training and advancement. This complaint was also voiced by some employees in the context of the section that dealt with work itself, and, as the researcher will show, it is also significant in the context of the next factor: promotion.

#### **5.4.6 Promotion**

This section of the questionnaire was designed to investigate the level of satisfaction with the promotion system from a number of different angles. Four questions were asked which dealt with the employees' feelings about: their advancement prospects, their opportunities for advancement and getting ahead; and the promotion system. The final question in the section was intended to measure the workers' overall level of satisfaction with promotion in the offset companies.

The responses for this section were as follows:

Table and Chart 5.85: My feeling for advancement

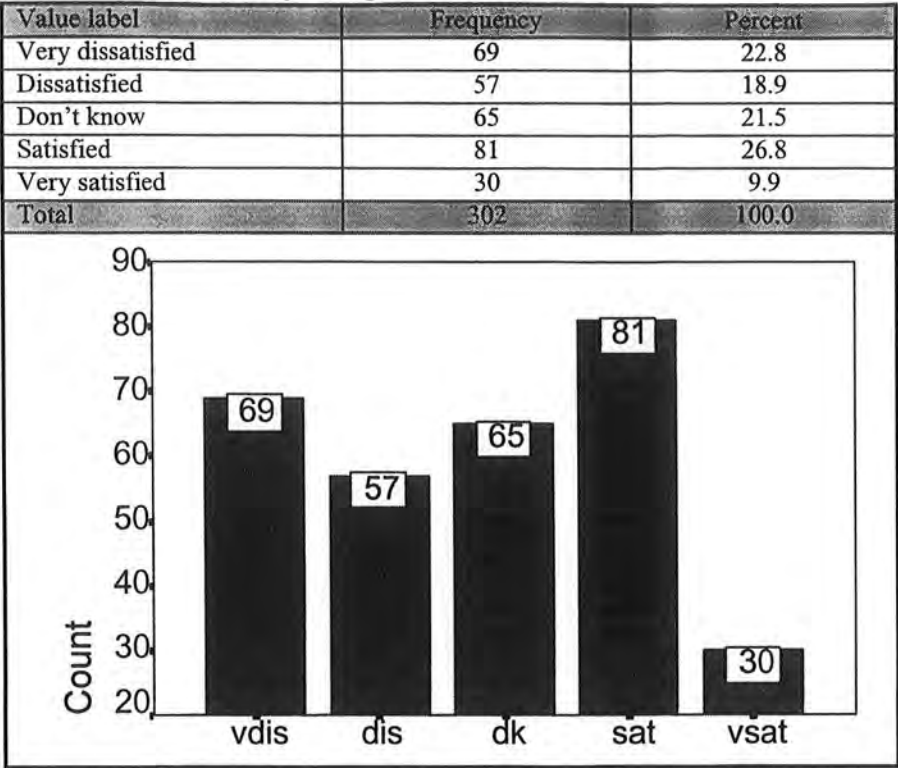


Table and Chart 5.86: The opportunity for advancement in my job

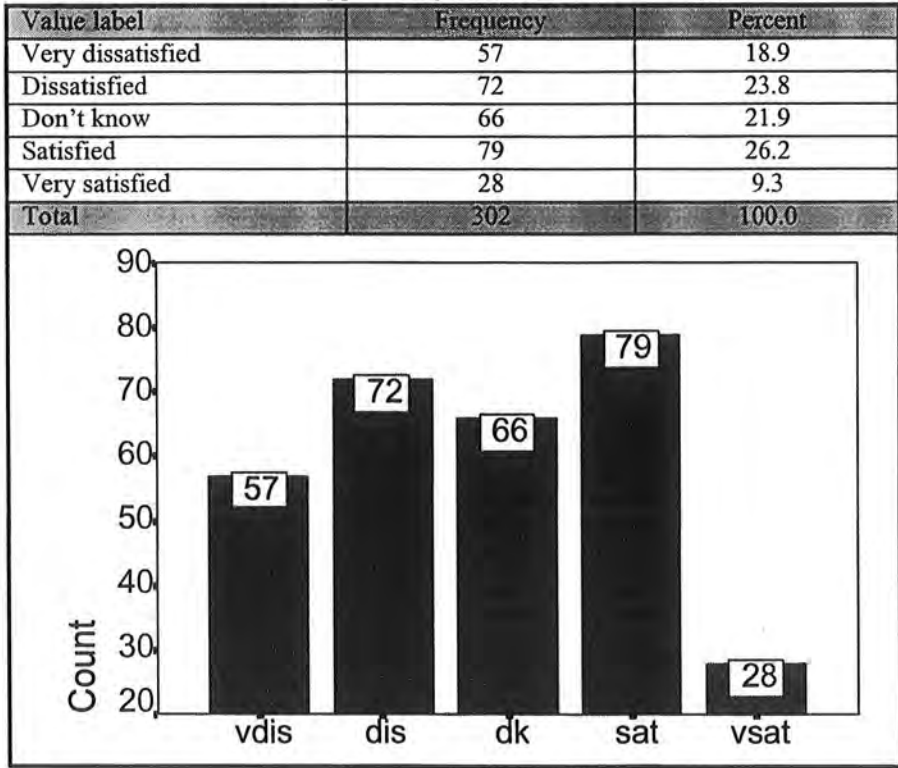


Table and Chart 5.87: The opportunity for getting ahead in my job

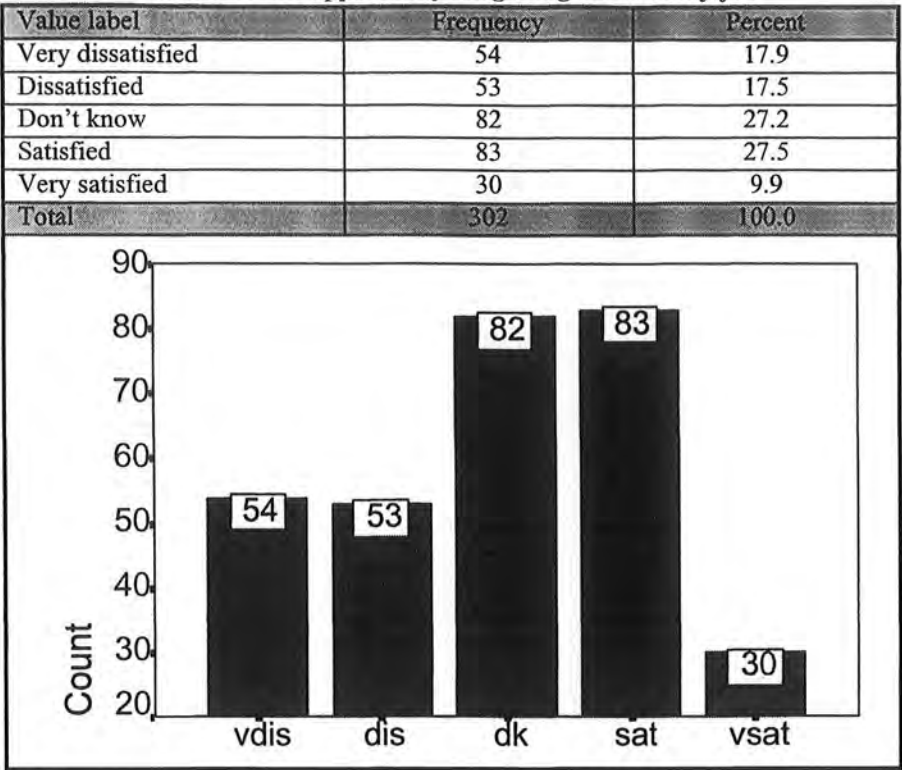
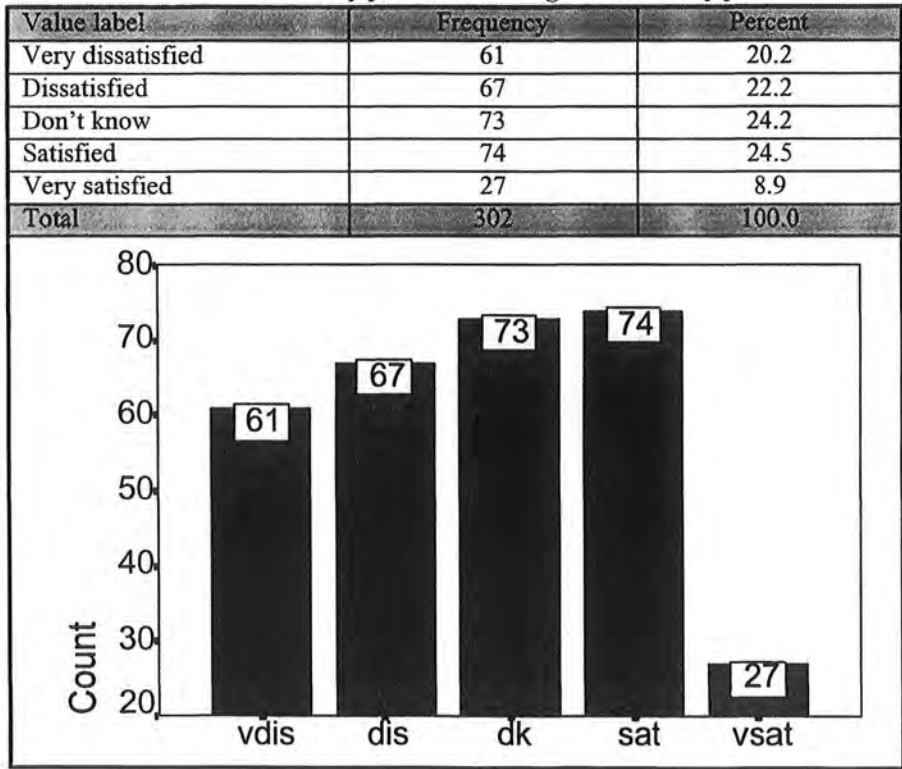
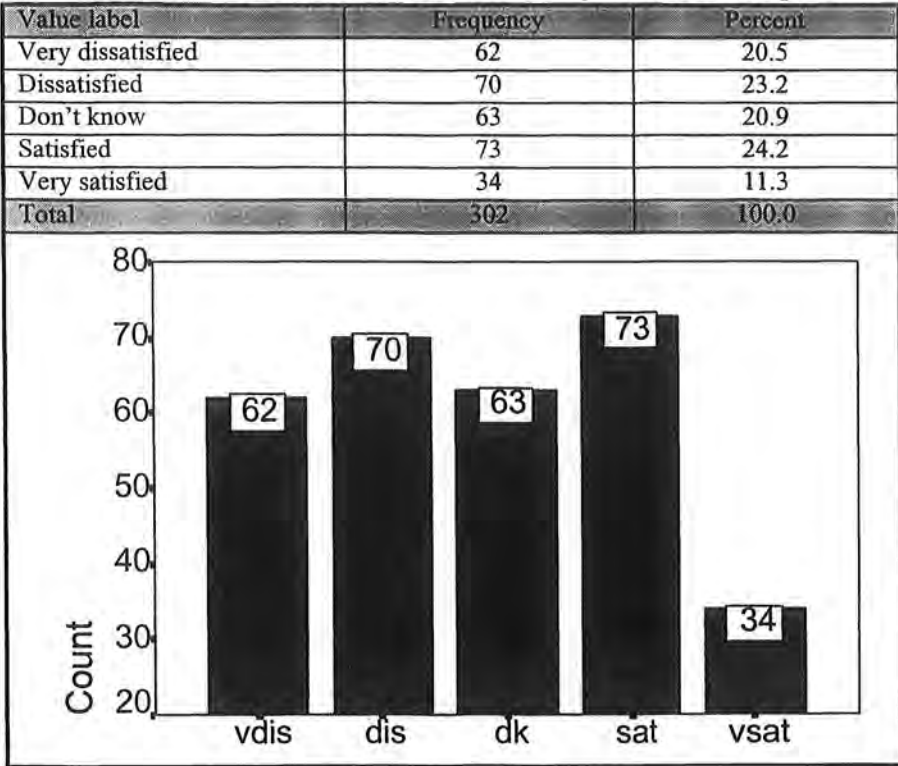


Table and Chart 5.88: The way promotions are given out in my job





**Table and Chart 5.89: All in all, to what extent are you satisfied with promotion?**



The answers to all of the questions in this section suggest that there is a quite deep general disenchantment with the offset companies' policies on promotion.

The first three questions (Questions 54-56 and Tables 5.85-5.87) demonstrated that only about 35 to 36 percent of the respondents were prepared to express some degree of satisfaction with promotion prospects and opportunities for advancement, while around 40 percent of employees expressed outright dissatisfaction in these areas, and a further 20 percent or so expressed uncertainty. The interviews enabled respondents to say why they felt dissatisfied. They explained that employees have to work at least three years in order to be promoted, and sometimes have to wait for more than four years. Moreover, there are no regulations or clear procedures for promotion, which, according to many employees often depends on favouritism.

The results to Question 57 (Table 5.88), concerning the way that promotions are awarded, were similar to the responses for the previous three questions. Only 33.4 percent of workers expressed some degree of satisfaction. 22.2 percent were dissatisfied. 20.5 percent (or better than one in five of the respondents) were very dissatisfied. A further 24.2 percent were either uncertain, or perhaps felt insecure about the question and did not want to respond that they were either satisfied or dissatisfied. Interviews also indicated that the offset company employees tend to have very negative feelings about the promotion system. The criticisms could be classified as belonging to two distinct groups. The first group included complaints that too much emphasis was placed on seniority and not enough on performance or qualifications. One employee said: "Promotion should be awarded according to employees' achievements and not by the number of years' service, as is the case now." Another noted: "The big mistake made in official promotions is the lack of appreciation and the waste of talents as a result of the unjust practices which exist." This view was confirmed by the following comments from other interviewees: "There is no appreciation for hard workers, whether through promotion or financial compensation"; and "There is a lack of appreciation by my director for my achievements...No recognition is given when my work is performed thoroughly and accurately, while I am blamed if a mistake is made unintentionally....Rewards are presented to those who do not deserve it". A second sort of complaint, once again, involved favouritism or self-interest on the part of employees in supervisory and management positions. One interviewee commented: "Active and idle employees are normally balanced. The idle might be favoured for wasting working hours in establishing personal relations with the influential people in the company administration." Another employee observed: "Job disorder is not normally caused by staff as much as by methods applied in the company administration which are based on

absolute authority and personal interest. Instead of criticising administrative methods for any problem and mistakes that occur, employees are normally blamed.”

One employee nicely summed up the general sentiment about promotions, saying: “The promotion system is unfair and I think the policy makers should do something about it.”

The following crosstabulations show that high levels of satisfaction extend across the range of workers in all of the different age, qualification and job title groups in the offset companies.

**Table 5.90: Age/Promotion Crosstabulation**

Age * Promotion Crosstabulation						
		Promotion				
		vdis	dis	dk	sat	vsat
Age	18-25	8 13.1%	11 18.0%	15 24.6%	17 27.9%	10 16.4%
	26-35	44 24.7%	46 25.8%	36 20.2%	35 19.7%	17 9.6%
	36-45	9 16.7%	11 20.4%	12 22.2%	15 27.8%	7 13.0%
	46-55	1 11.1%	2 22.2%		6 66.7%	
Total		62 20.5%	70 23.2%	63 20.9%	73 24.2%	34 11.3%
						100.0%

**Table 5.91: Qualification/Promotion Crosstabulation**

Qualification * Promotion Crosstabulation							
		Promotion					Total
		vdis	dis	dk	sat	vsat	
Qualification	elementryschool	2 22.2%	3 33.3%	1 11.1%	3 33.3%		9 100.0%
	intermediateschool	8 26.7%	2 6.7%	7 23.3%	10 33.3%	3 10.0%	30 100.0%
	secondaryschool	16 23.2%	24 34.8%	13 18.8%	11 15.9%	5 7.2%	69 100.0%
	diploma	17 21.8%	15 19.2%	12 15.4%	21 26.9%	13 16.7%	78 100.0%
	universitydegree	16 18.2%	21 23.9%	20 22.7%	23 26.1%	8 9.1%	88 100.0%
	highdegree	3 10.7%	5 17.9%	10 35.7%	5 17.9%	5 17.9%	28 100.0%
	Total	62 20.5%	70 23.2%	63 20.9%	73 24.2%	34 11.3%	302 100.0%

**Table 5.92: Job Title/Promotion Crosstabulation**

		Job title * Promotion Crosstabulation				
		Promotion				
		vdis	dis	dk	sat	vsat
Job title	supervisor	16 33.3%	8 16.7%	8 16.7%	14 29.2%	2 4.2%
						48 100.0%
	manager	5 11.6%	9 20.9%	10 23.3%	15 34.9%	4 9.3%
						43 100.0%
	engineer	8 13.8%	14 24.1%	15 25.9%	11 19.0%	10 17.2%
						58 100.0%
	technician	25 23.6%	21 19.8%	22 20.8%	22 20.8%	16 15.1%
Total						106 100.0%
	clerk	4 12.5%	12 37.5%	7 21.9%	7 21.9%	2 6.3%
						32 100.0%
	security	4 26.7%	6 40.0%	1 6.7%	4 26.7%	
						15 100.0%
Total		62 20.5%	70 23.2%	63 20.9%	73 24.2%	34 11.3%
						302 100.0%

The results for Question 58 on overall satisfaction with promotion, as one would expect, and as one can see clearly in Table 5.89, were consistent with the responses to the other questions in the section, with 35.5 percent reporting satisfaction to some extent, 43.7 percent reporting dissatisfaction, and 20.9 percent expressing uncertainty. The data from both the questionnaire and the interviews would seem to show quite conclusively that the promotion systems in the respective offset companies are in need of radical reform.

As the researcher indicated in Chapter Three, promotion has been strongly associated with job satisfaction by a considerable number of scholars (Locke, 1976; Gerhart, 1987; Argyle, 1989, Safia, 1989; Hackett, 1992; and Travers and Cooper, 1993). It is widely held to be important as a potential cause of either satisfaction or dissatisfaction in the workplace because it can create positive or negative changes in the work environment, which may affect both the individual promoted and other personnel. From an individual employee's perspective, promotion is usually followed by increases in pay, responsibility, job challenge, and autonomy. It may entail a substantial change in the actual tasks that make up the employee's work, and could have a considerable impact

on the employee's relationships with co-workers. These could be positive or negative influences depending largely upon whether or not the employee fits well into his new job and how fellow employees perceive and respond to the change.

In order to test the extent to which promotion affected levels of job satisfaction in the offset companies, the researcher generated the following hypothesis and null hypothesis:

H 2.6 There is a significant relationship between the respondent's general satisfaction with promotion and the degree of job satisfaction.

H 0 2.6 There is no significant relationship between the respondent's general satisfaction with promotion and the degree of job satisfaction.

The researcher then performed a Spearman Correlation Coefficient Two-Tailed Test and found a significance of .451 for promotion, which is highly significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between respondent's general satisfaction with the promotion and the degree of job satisfaction was rejected.

The researcher would conclude this section by observing that promotion was clearly significant as a negative factor relative to the high overall levels of job satisfaction in the offset companies. This is not because most of the employees assign no value to their advancement prospects and the promotion system, but rather because they generally assign these things a significant value, and are not satisfied with the existing arrangements. When questioned about their overall satisfaction with promotion, more workers (43.7 percent) expressed outright dissatisfaction than expressed satisfaction

(35.5 percent). Better than one in five workers (20.9 percent) expressed uncertainty. Similar figures were reported for every single question in the section, and in the follow-up interviews most workers complained either that promotions were awarded based on seniority rather than performance and qualifications, or that promotions were awarded based on favouritism or self-interest on the part of supervisors and management. Clearly, this is an area where the companies' administrations need to change their policies and try to improve worker satisfaction levels.

#### **5.4.7 Working Conditions**

The first four questions in this section of the questionnaire examined four aspects of working conditions: the physical aspect of the work environment; the pleasantness of the working conditions; the hours of work; and the equipment employees were required to use. As was the case with the other sections, the final question in this section assessed the overall level of satisfaction with working conditions.

The responses for this section were as follows:

Table and Chart 5.93: Working conditions (heating, lighting, ventilation, etc.)

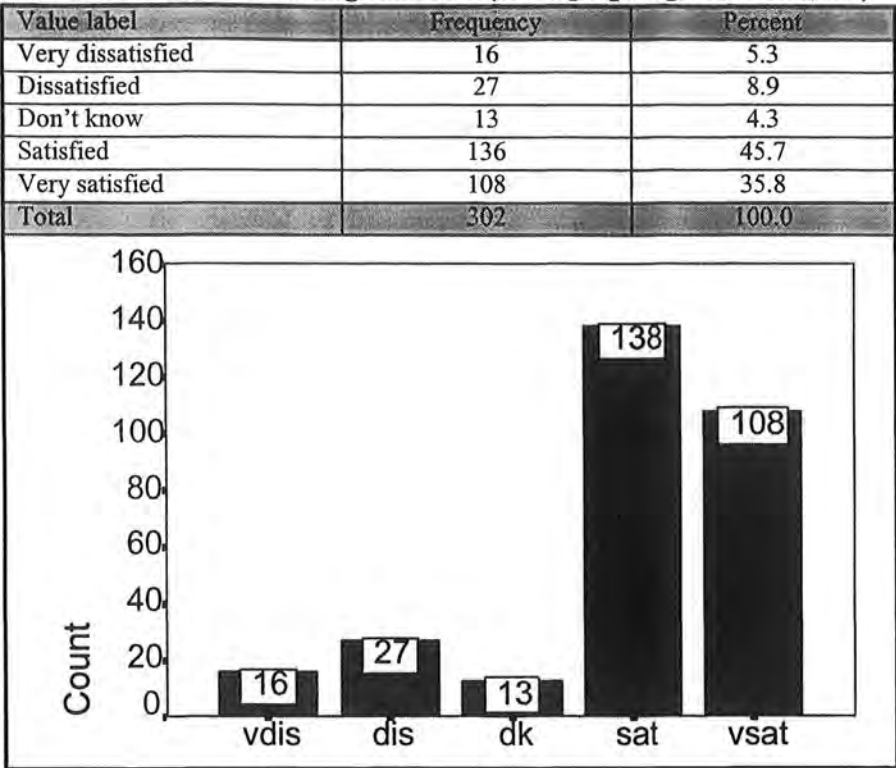


Table and Chart 5.94: The pleasantness of working conditions

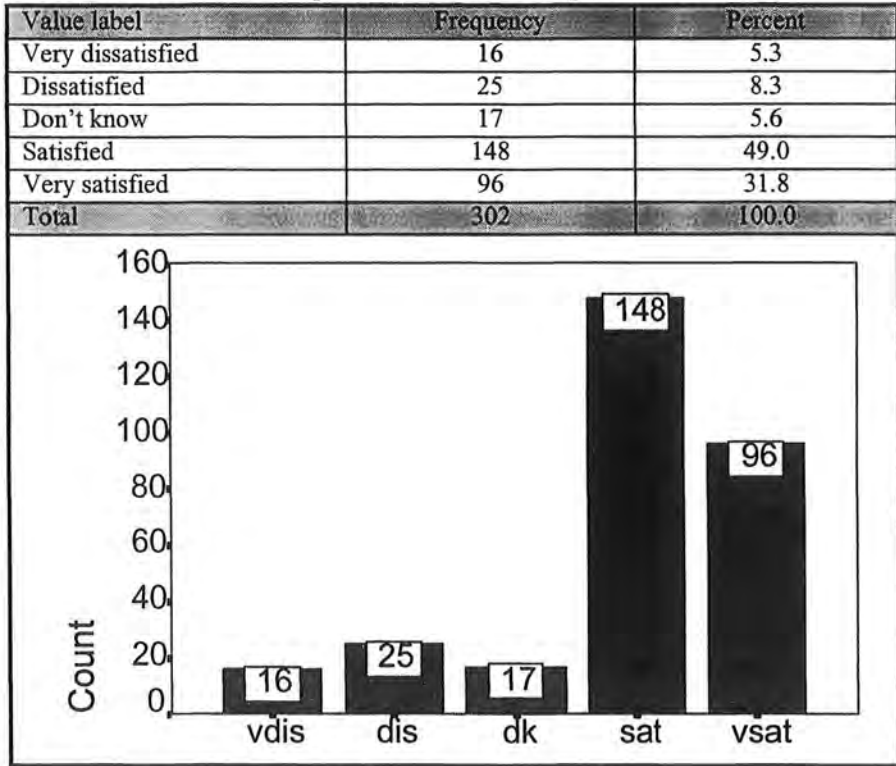


Table and Chart 5.95: The working hours

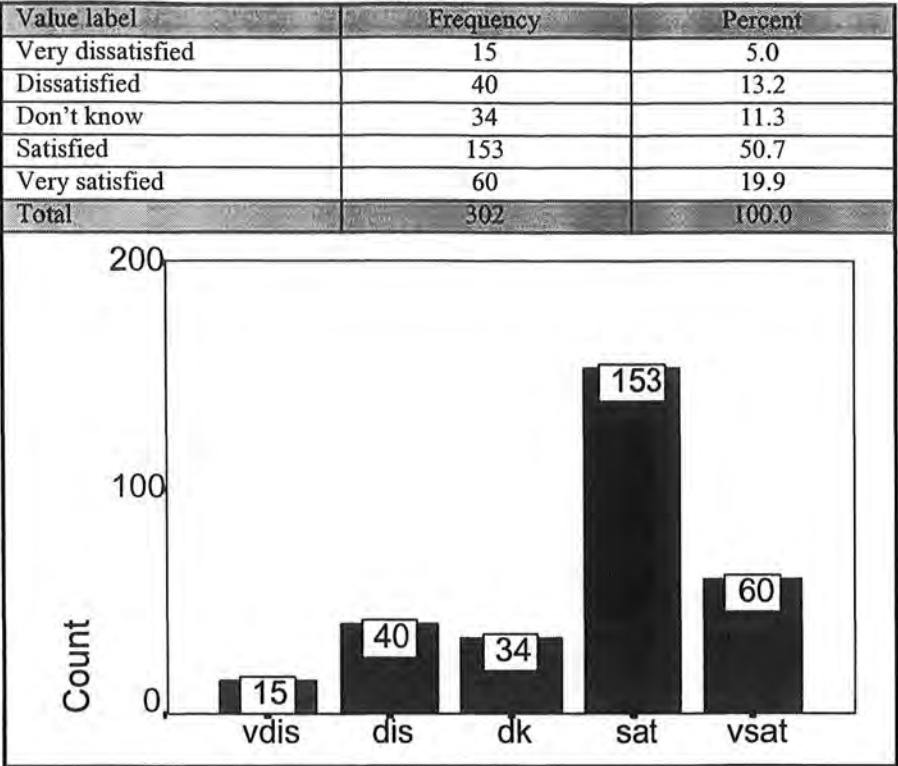
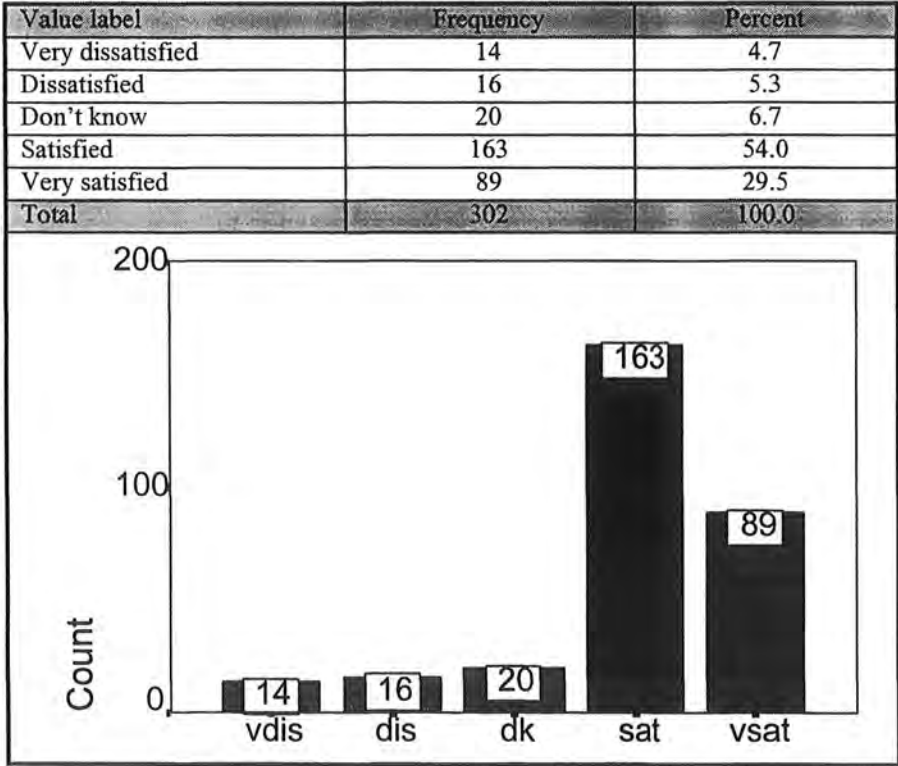
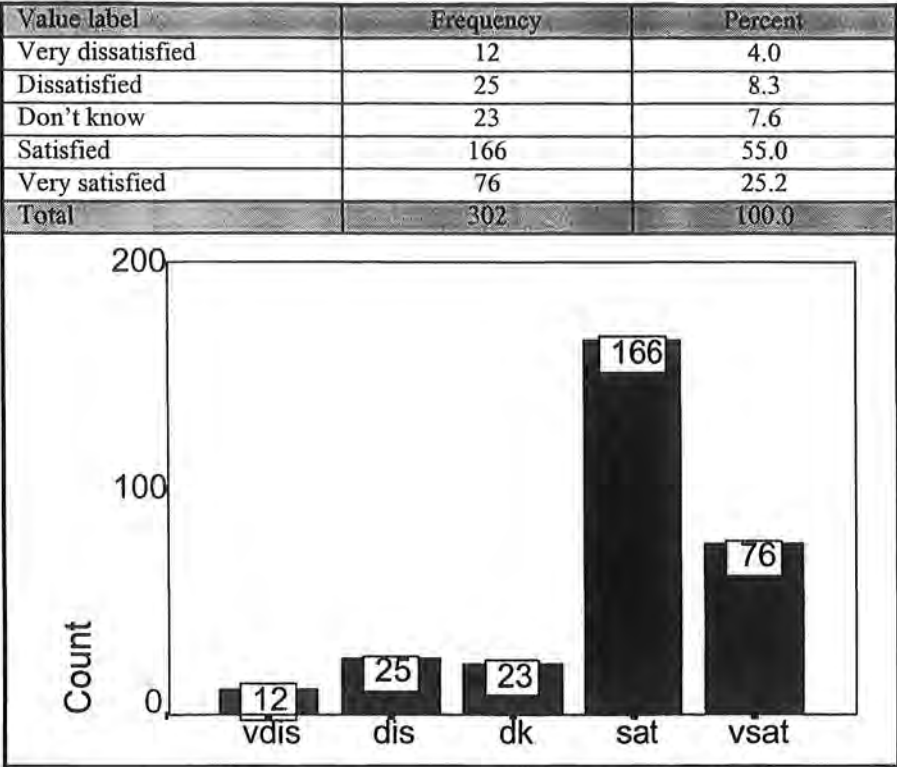


Table and Chart 5.96: The equipment used in your work





**Table and Chart 5.97: All in all, to what extent are you satisfied with working conditions?**



The large majority of the sample (over 80 percent in each case) who were satisfied or very satisfied with their physical working environment and equipment, as expressed in the responses to Questions 59, 60 and 62 (Tables 5.93, 5.94, and 5.96) is no doubt largely the result of the offset companies' premises having been recently built with all of the cutting-edge facilities required for work in high technology industry. Crosstabulations between job title and working conditions and qualification and working conditions show that high percentages of workers in all job categories and levels of training are either satisfied or very satisfied with the work facilities and equipment provided by the offset companies.

**Table 5.98: Job Title/Working Conditions Crosstabulation**

		Working conditions					Total
		vdis	dis	dk	sat	vsat	
Job title	supervisor	2 4.2%	4 8.3%	4 8.3%	22 45.8%	16 33.3%	48 100.0%
	manager		2 4.7%	4 9.3%	22 51.2%	15 34.9%	43 100.0%
	engineer	1 1.7%	5 8.6%	2 3.4%	41 70.7%	9 15.5%	58 100.0%
	technician	8 7.5%	9 8.5%	9 8.5%	57 53.8%	23 21.7%	106 100.0%
	clerk		5 15.6%	2 6.3%	19 59.4%	6 18.8%	32 100.0%
	security	1 6.7%		2 13.3%	5 33.3%	7 46.7%	15 100.0%
	Total	12 4.0%	25 8.3%	23 7.6%	166 55.0%	76 25.2%	302 100.0%

**Table 5.99: Qualification/Working Conditions Crosstabulation**

		Working condition					Total
		vdis	dis	dk	sat	vsat	
Qualification	elementryschool			1 11.1%	3 33.3%	5 55.6%	9 100.0%
	intermediateschool	2 6.7%	1 3.3%	3 10.0%	17 56.7%	7 23.3%	30 100.0%
	secondarieschool	2 2.9%	9 13.0%	9 13.0%	37 53.6%	12 17.4%	69 100.0%
	diploma	7 9.0%	4 5.1%	3 3.8%	37 47.4%	27 34.6%	78 100.0%
	universitydegree	1 1.1%	9 10.2%	7 8.0%	56 63.6%	15 17.0%	88 100.0%
	highdegree		2 7.1%		16 57.1%	10 35.7%	28 100.0%
	Total	12 4.0%	25 8.3%	23 7.6%	166 55.0%	76 25.2%	302 100.0%

Question 61 (Table 5.95) was intended to discover whether the working hours in the offset companies were appropriate and consistent with employees' workload. The responses indicated that over 70 per cent were satisfied, though there may seem to be some conflict here with the results to Question 37 which asked respondents if their work left them enough time to spend with their families, and to which only 52.3 percent expressed satisfaction.

Finally, Question 62 measured overall satisfaction with working conditions in the offset companies. As can be seen in Table 5.97, 55 percent of workers reported being satisfied, and a further 25.2 percent reported being very satisfied. Only 12.3 percent of workers reported a degree of dissatisfaction, while only 7.6 percent expressed uncertainty.

As was the case with job benefits, it may be that a number of employees do not really consider working conditions to be particularly important with respect to their overall satisfaction. In conducting interviews, the researcher noted that few employees felt a need to talk about working conditions, and were more concerned with factors such as the work itself, pay and the promotion system. Of course, if the facilities and equipment were not adequate, it is probable that the employees would have assigned a higher value to this area. This may validate to some extent Herzberg's notion (detailed in Chapter Three) that there are some factors that do not really contribute to satisfaction if they are present and adequate, but which generate dissatisfaction if they are absent or inadequate.

As the researcher demonstrated in Chapter Three, many scholars have argued that there is some sort of relationship between working conditions and job satisfaction (Locke, 1976; Ball and Stenlund, 1990; Evans and Johnson, 1990; Taylor and Tashakori 1995; and Muchinsky, 1997). Ashour (1983) observed that the literature in this area emphasises the importance of improving work conditions to avoid any negative reaction from workers such as stress, dissatisfaction and other unfavourable consequences.

In order to determine the significance of working conditions as they relate to overall job satisfaction, the researcher generated the following hypothesis and null hypothesis:

H 2.7 There is a significant relationship between the respondent's general satisfaction with working condition and the degree of job satisfaction.

H 0 2.7 There is no significant relationship between the respondent's general satisfaction with working condition and the degree of job satisfaction.

The researcher then performed a Spearman Correlation Coefficient Two-Tailed Test. The result was .318, which is highly significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between respondent's general satisfaction with the working conditions and the degree of job satisfaction was rejected.

The overwhelmingly positive response to the questions in this section might lead one to conclude that working conditions are a very important component in relation to the high overall levels of worker satisfaction in the offset companies. The researcher feels that working conditions certainly do contribute to the high satisfaction level to some extent, but perhaps not as much as many of the other factors, a conclusion that is supported both by the lack of enthusiasm for talking about conditions in the interviews and by the Spearman Correlation Coefficient finding (which is significant, but less so than for most of the other factors tested).

#### **5.4.8 Co-Workers**

This section contained two questions designed to gain information about employees' attitudes towards different aspects of their working relationship with their co-workers, and a final question asking about overall satisfaction with co-workers.

The responses for this section of the questionnaire were as follows:

Table and Chart 5.100: Relationship with my co-workers

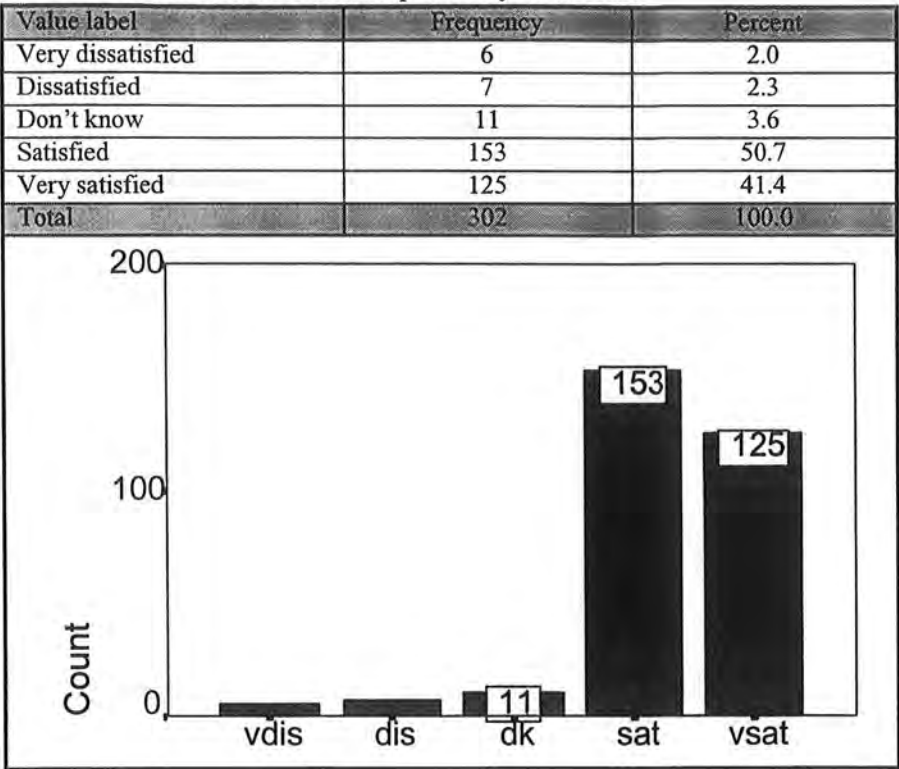
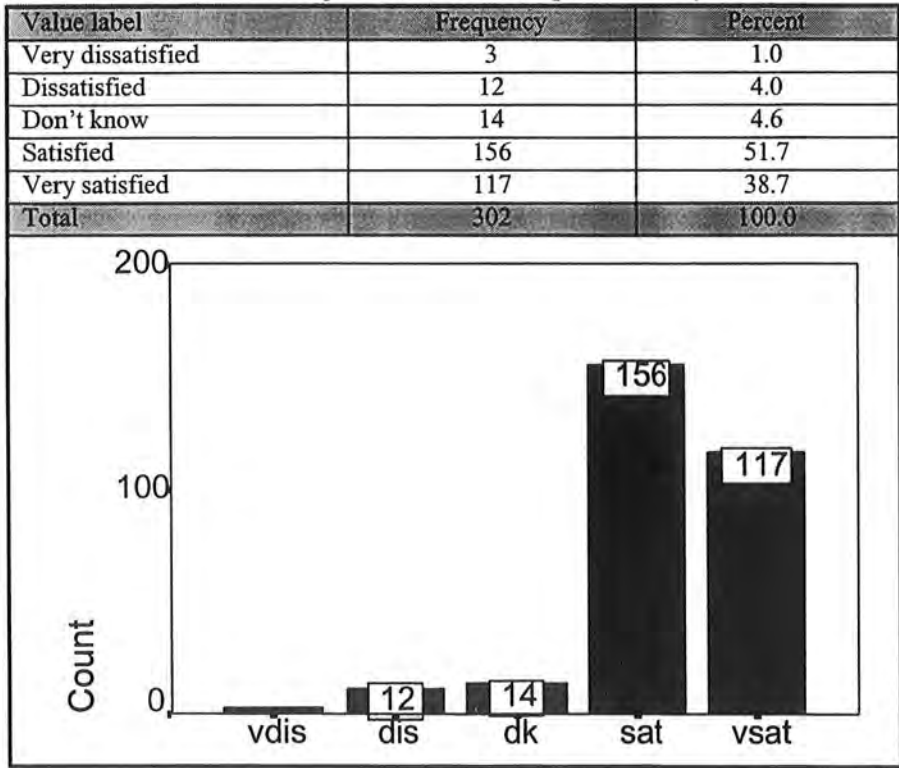
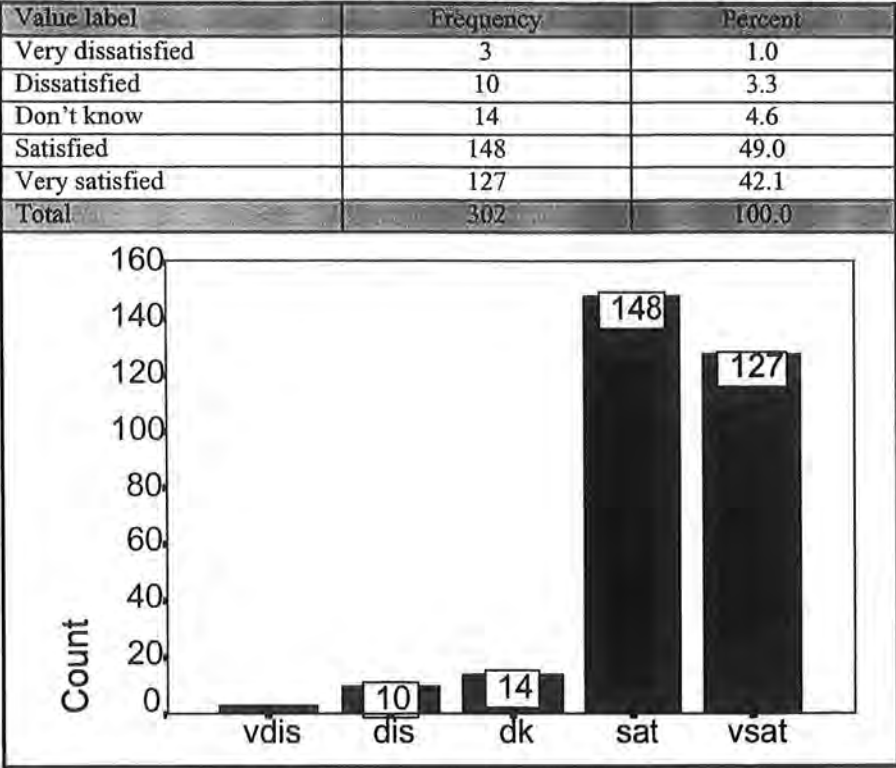


Table and Chart 5.101: Cooperation in the workplace with my co-workers



**Table and Chart 5.102: All in all, to what extent are you satisfied with your co-workers?**



The results for all three of these questions show conclusively that there is a general friendliness and spirit of cooperation among employees in the offset companies, which can only be to the benefit of both the companies and the employees. Around 50 percent of the respondents indicated that they were satisfied with their relationships (Question 64/Table 5.100) and their cooperation (Question 65/Table 5.101) with their co-workers, with approximately a further 40 percent reporting that they were very satisfied with these aspects. Only 4 or 5 percent were dissatisfied, and between 4 and 5 percent were uncertain. The responses to the question about overall satisfaction with co-workers (Question 66/Table 5.102) were nearly identical.

The following crosstabulations show that there is a very high percentage of overall satisfaction with co-workers irrespective of age, job title, qualification, or marital status.

Table 5.103: Age/Co-Worker Crosstabulation

		Co-workers					Total
		vdis	dis	dk	sat	vsat	
Age	18-25		2 3.3%	1 1.6%	25 41.0%	33 54.1%	61 100.0%
	26-35	3 1.7%	3 1.7%	12 6.7%	87 48.9%	73 41.0%	178 100.0%
	36-45		5 9.3%	1 1.9%	29 53.7%	19 35.2%	54 100.0%
	46-55				7 77.8%	2 22.2%	9 100.0%
	Total	3 1.0%	10 3.3%	14 4.6%	148 49.0%	127 42.1%	302 100.0%

Table 5.104: Job Title/Co-Worker Crosstabulation

		Co-workers					Total
		vdis	dis	dk	sat	vsat	
Job title	supervisor	2 4.2%	1 2.1%	1 2.1%	24 50.0%	20 41.7%	48 100.0%
	manager			1 2.3%	23 53.5%	19 44.2%	43 100.0%
	engineer		1 1.7%	3 5.2%	41 70.7%	13 22.4%	58 100.0%
	technician	1 .9%	6 5.7%	3 2.8%	39 36.8%	57 53.8%	106 100.0%
	clerk		1 3.1%	6 18.8%	15 46.9%	10 31.3%	32 100.0%
	security		1 6.7%		6 40.0%	8 53.3%	15 100.0%
	Total	3 1.0%	10 3.3%	14 4.6%	148 49.0%	127 42.1%	302 100.0%

Table 5.105: Qualification/Co-Worker Crosstabulation

		Co-workers					Total
		vdis	dis	dk	sat	vsat	
Qualification	elementryschool				5 55.6%	4 44.4%	9 100.0%
	intermediateschool	1 3.3%		3 10.0%	9 30.0%	17 56.7%	30 100.0%
	secondaryschool		5 7.2%	6 8.7%	32 46.4%	26 37.7%	69 100.0%
	diploma	2 2.6%	3 3.8%	1 1.3%	30 38.5%	42 53.8%	78 100.0%
	universitydegree		1 1.1%	3 3.4%	56 63.6%	28 31.8%	88 100.0%
	highdegree		1 3.6%	1 3.6%	16 57.1%	10 35.7%	28 100.0%
	Total	3 1.0%	10 3.3%	14 4.6%	148 49.0%	127 42.1%	302 100.0%

**Table 5.106: Marital Status/Co-Worker Crosstabulation**

Marital status * Co-workers Crosstabulation							
		Co-workers					Total
		vdis	dis	dk	sat	vsat	
Marital status	married	2 1.0%	6 2.9%	10 4.8%	102 48.6%	90 42.9%	210 100.0%
	single	1 1.1%	4 4.3%	4 4.3%	46 50.0%	37 40.2%	92 100.0%
Total		3 1.0%	10 3.3%	14 4.6%	148 49.0%	127 42.1%	302 100.0%

As the researcher indicated in Chapter Three, a number of scholars have linked the quality of relationships and the level of cooperation with co-workers and/or one's work group with overall levels of job satisfaction (Gilmer, 1966; Maslow, 1970; Lawler, 1973; Gruneberg, 1979; Armstrong, 1988; Ward and Holdaway, 1994; and Tierny 1997). Cohesiveness and harmony with fellow workers and within one's work group creates co-operation and a friendly work environment that encourages the employee to continue working in an organisation. Unfavourable developments, such as conflict between co-workers, could lead to negative consequences such as employees leaving the job, absenteeism, low productivity, employees sabotaging each other's work and general dissatisfaction. All of these potential negative consequences would obviously be very costly to any employing organisation.

In order to test the importance of the co-workers factor as it relates to overall satisfaction in the offset companies, the researcher generated the following hypothesis and null hypothesis:

H 2.8 There is a significant relationship between the respondent's general satisfaction with Co-workers and the degree of job satisfaction.

H 0 2.8 There is no significant relationship between the respondent's general satisfaction with Co-workers and the degree of job satisfaction.



The researcher then subjected the data to a Spearman Correlation Coefficient Two-Tailed Test, and found a significance of .264, which is very significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between the respondent's general satisfaction with the co-workers and the degree of job satisfaction was rejected.

The overwhelming majority of respondents (around 90 percent) who indicated that they were either satisfied or very satisfied with their co-workers, both overall, and in terms of the specific aspects tested by the research questionnaire, suggests that co-workers are an important component of the high overall levels of job satisfaction in the offset companies. It is not clear that employees regard this factor as being as important as some of the more personal imperatives such as pay, recognition and promotions, but the high level of fellowship in the offset companies is certainly a benefit the organisations will want to maintain in the future.

#### **5.4.9 Status**

This section of the questionnaire was devoted to measuring employees' satisfaction with the status they acquire as a result of their jobs, not so much within the company (i.e., from recognition or promotion) as within the broader social context. The first four items in the section were concerned with the possible ways in which employees could assess their status, while the final question asked about their overall satisfaction with job-related status.

The responses for this section were as follows:

Table and Chart 5.107: The social status I get from my job

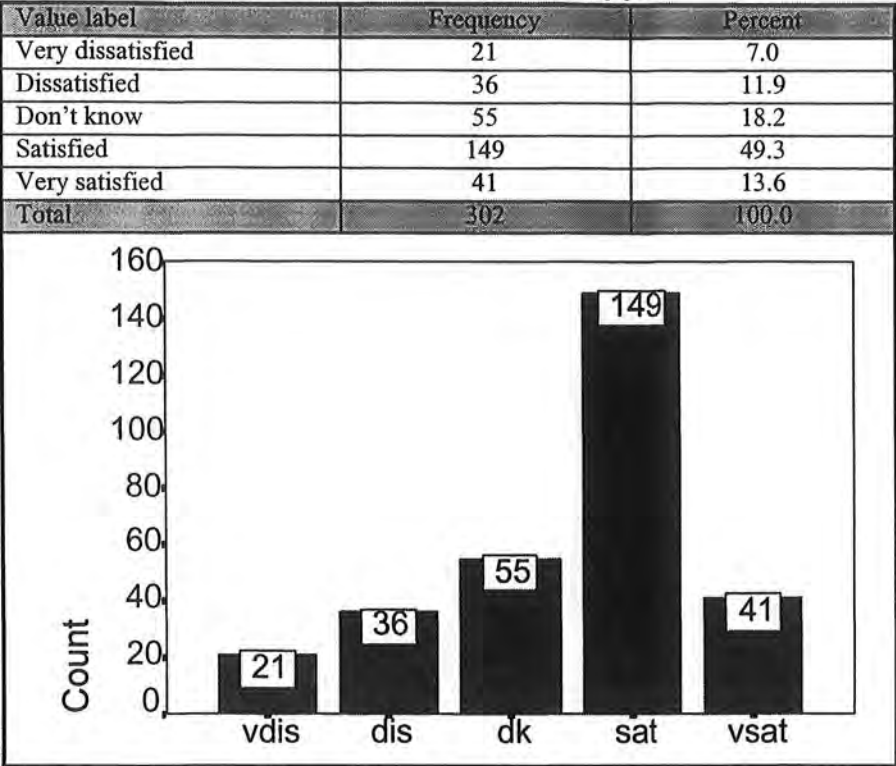
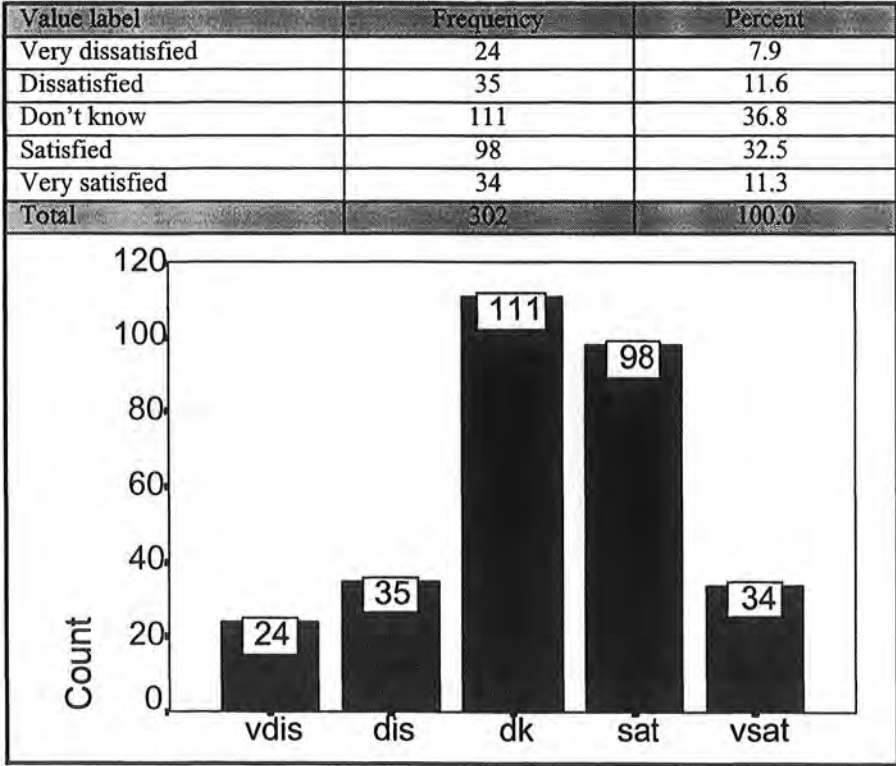
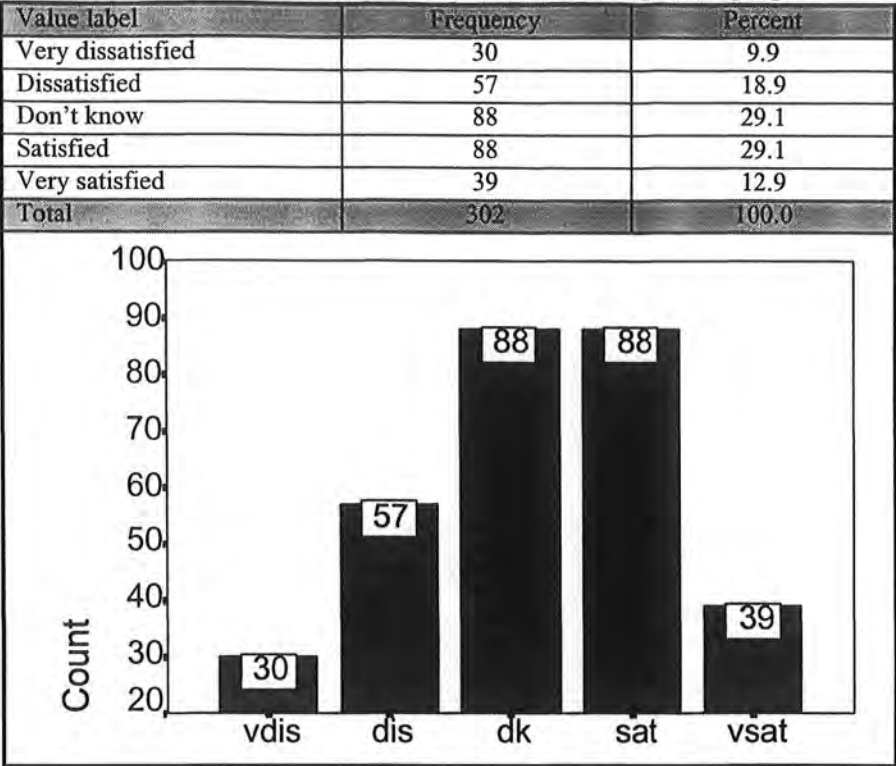


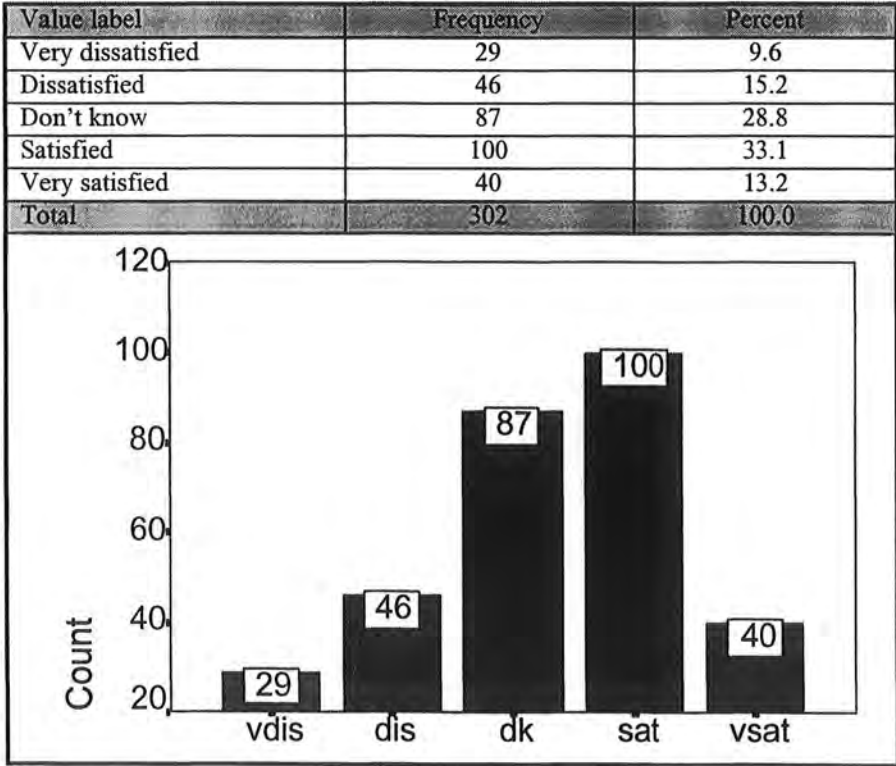
Table and Chart 5.108: The reputation my family gets from my job



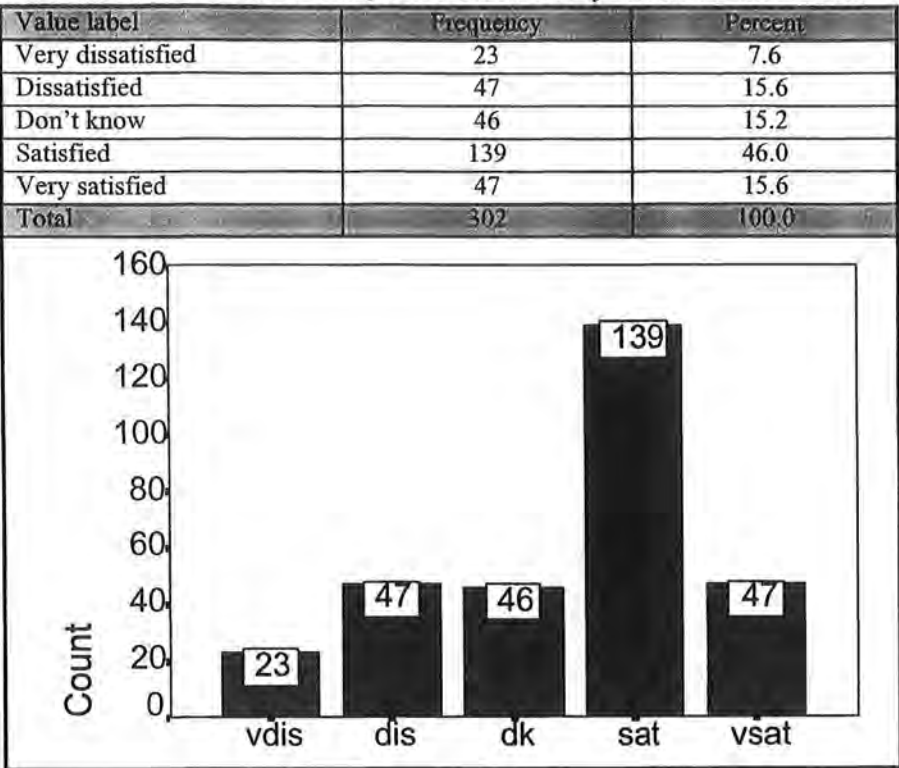
**Table and Chart 5.109: The opportunity to be around important people**



**Table and Chart 5.110: The opportunity to be important in the eyes of others**



**Table and Chart 5.111: All in all, to what extent are you satisfied with status?**



The responses to the first question in the section (Question 67/Table 5.107) concerning work-related social status, showed that a fairly sizable majority (62.9 percent) of respondents were satisfied or very satisfied with the social status they derive from their jobs. 15.2 percent were uncertain and 23.2 percent expressed dissatisfaction to some degree.

The responses to the next three questions (Questions 68-70/Tables 5.108-5.110) concerning the status the worker's family derives from the job, opportunities to meet important people and to be important in the eyes of others, produced less favourable results, although better than 40 percent of employees reported some degree of satisfaction in each case. The most striking feature of these responses was not dissatisfaction, but the high proportion of "don't know" answers. The explanation for this could be that respondents were unsure of how they felt, did not understand the question, did not feel strongly one way or the other, or were reluctant to answer

decisively for some reason. When asked in interviews what they thought about the high levels of uncertainty for Question 68, many said they thought the status attached to themselves and not to their families. With respect to Questions 69 and 70 many interviewees pointed out that the majority of employees (top executives excepted) did not have connections with important people, nor did they have opportunities to appear important in the eyes of other people. It is possible that those whose answers to these questions were that they were satisfied were those who were not greatly concerned with personal status and importance.

The last question in this section (Question 71) was: "All in all, to what extent are you satisfied with status?" As Table 5.111 shows, the responses to this question revealed that there is a fairly high level of overall satisfaction with status. 61.6 percent of respondents were either satisfied or very satisfied, as opposed to 23.2 percent who were dissatisfied or very dissatisfied, while 15.2 percent of employees reported being uncertain. These responses are very similar to those for the first question in the section.

The researcher would observe that social status could be a fairly significant satisfaction factor for some employees. As the researcher explained in Chapter Three, Maslow (1970) indicated that social needs become an important priority for individuals after their basic physiological and safety and security needs have been satisfied. Social status is consequently an area where many workers are probably seeking fulfilment on a frequent basis. As the researcher indicated in Section 5.4.1, he feels that many workers in the offset companies derive considerable satisfaction and fulfilment from the knowledge that they are in the forefront of Saudi Arabia's future development plans. The fact that they are working in a cutting-edge high technology industry and have

access to some of the most advanced training and equipment in the world probably does positively affect the way that many other Saudis view them.

In order to determine the significance of status relative to the level of overall satisfaction in the offset companies, the researcher generated the following hypothesis and null hypothesis:

H 2.9 There is a significant relationship between the respondent's general satisfaction with status and the degree of job satisfaction.

H 0 2.9 There is no significant relationship between the respondent's general satisfaction with status and the degree of job satisfaction.

A Spearman Correlation Coefficient Two-Tailed Test was then performed, which indicated a significance of .467, which is highly significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between respondent's general satisfaction with status and the degree of job satisfaction was rejected.

The researcher feels that the fairly high percentage of satisfaction the respondents indicated with status overall probably supports, and contributes significantly to, the high finding concerning overall levels of satisfaction in the offset companies. The high percentage of uncertain responses to three of the questions in this section is probably not very significant. The high level of congruence between the responses to the first and last questions in the section suggests that the overall feeling about status is largely a function of a given employee's feeling about the personal status that he derives from his job, as opposed to family status or status through association with important people.

5.4.10 Organisation Policies

The aim of this section of the questionnaire was to find out to what extent employees were satisfied or dissatisfied with the characteristics, policies and practices of the organisation for which they work. This section follows the same pattern as previous ones, with seven questions addressing different aspects of the administration of the offset companies and a final question devoted to measuring the overall level of satisfaction with organisational policies and practices.

The responses to this section of the questionnaire were as follows:

Table and Chart 5.112: Organisational policy and the way in which it is administered

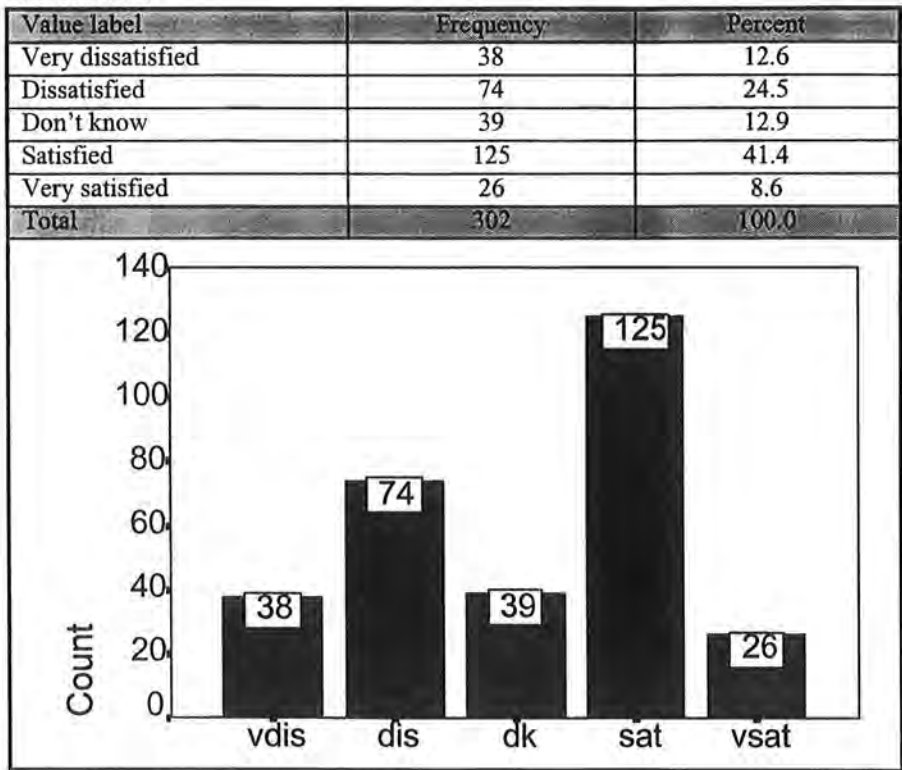


Table and Chart 5.113: The way employees are informed about organisation policies

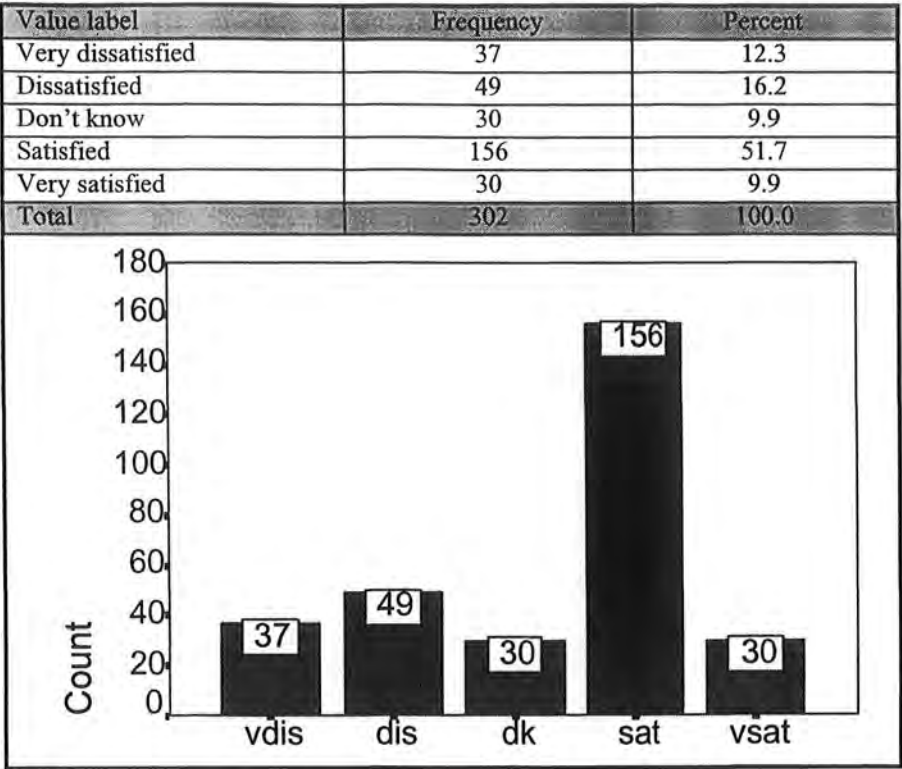


Table and Chart 5.114: The way I am informed about my job performance

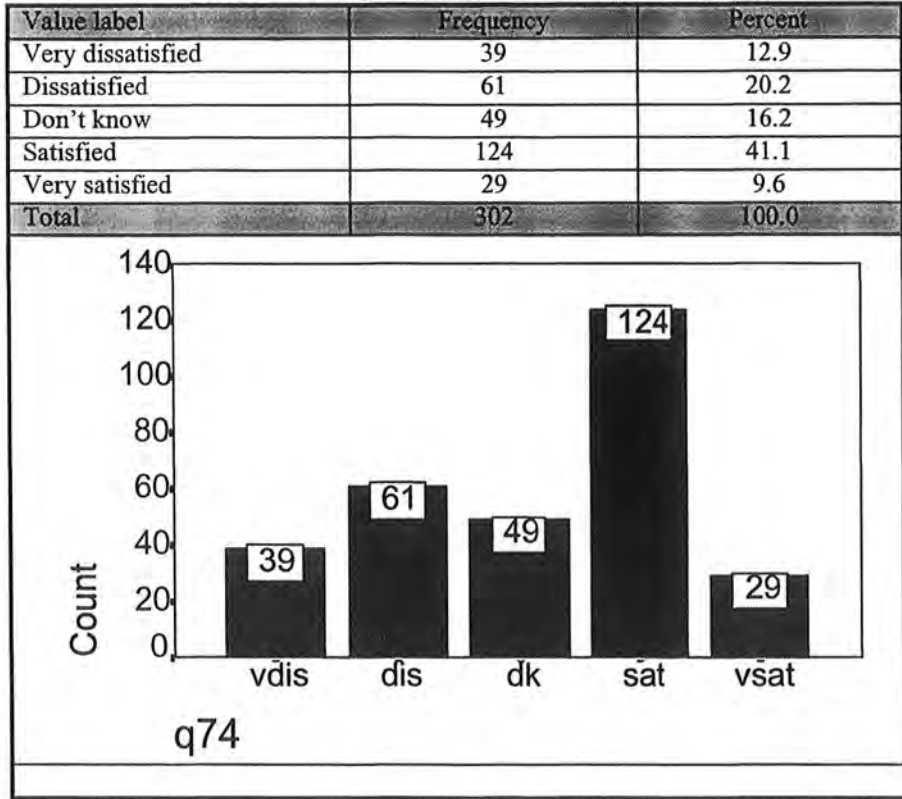




Table and Chart 5.115: The way the organisation treats its employees

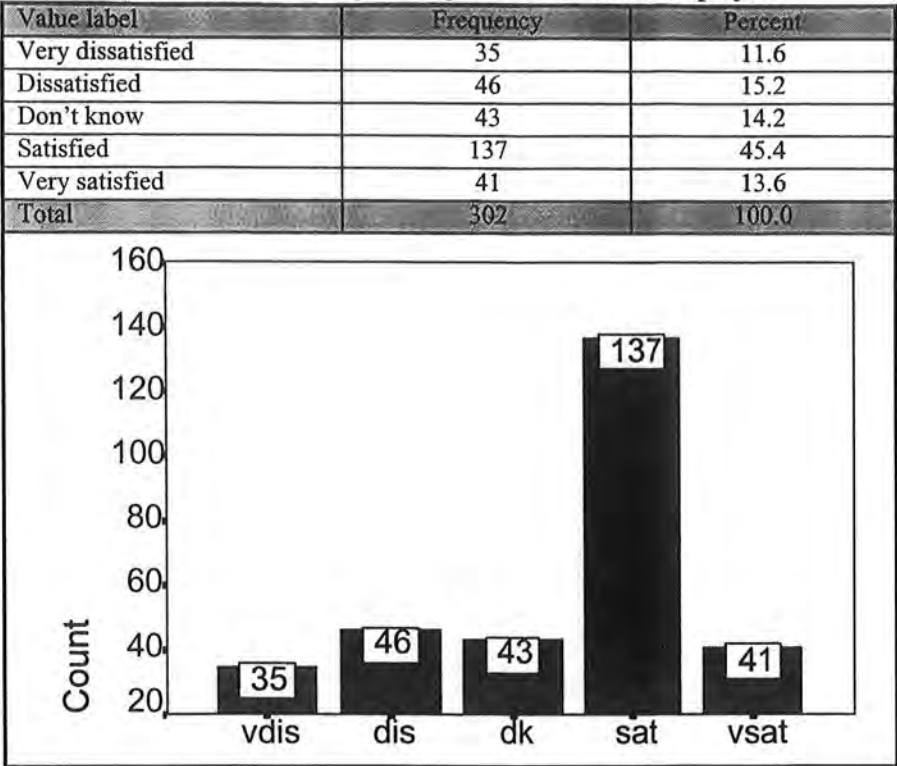


Table and Chart 5.116: The policies and practices with regard to employees

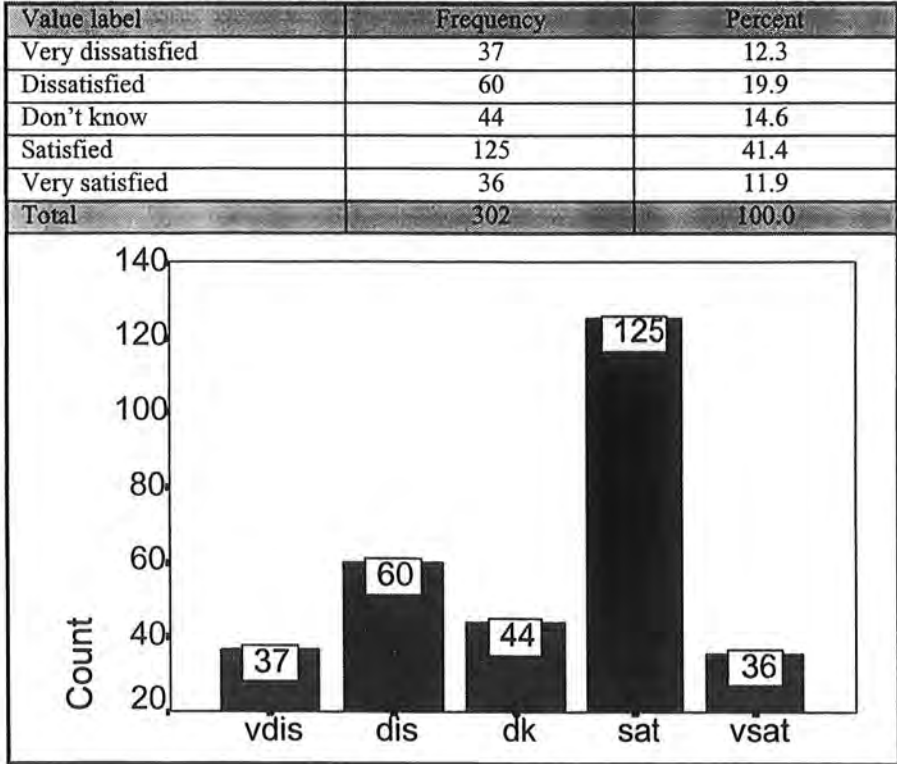


Table and Chart 5.117: The way organisational policies are put into practice

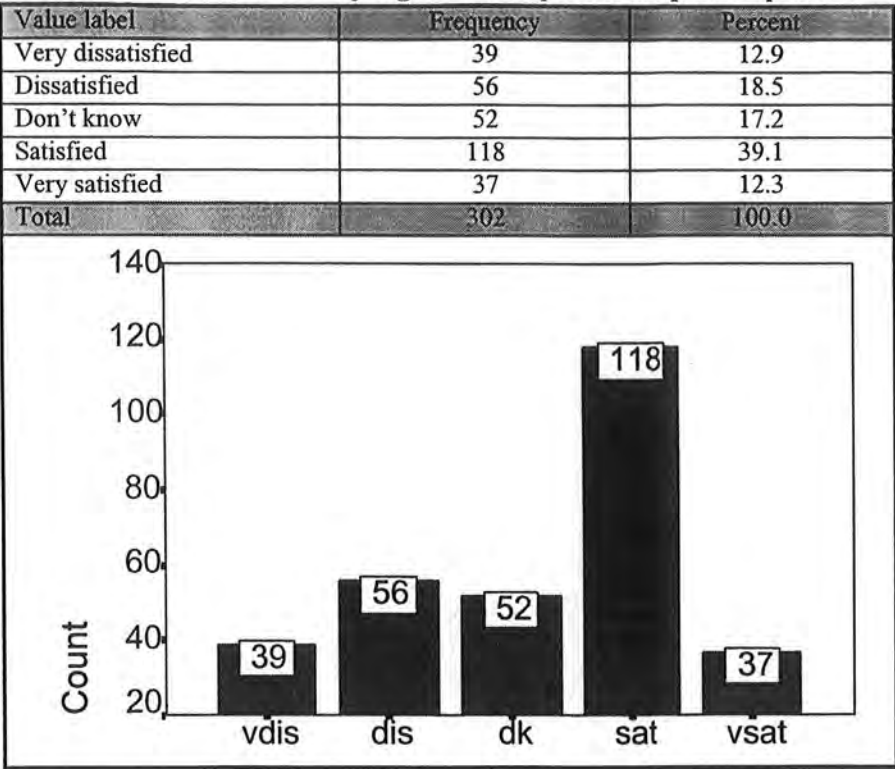
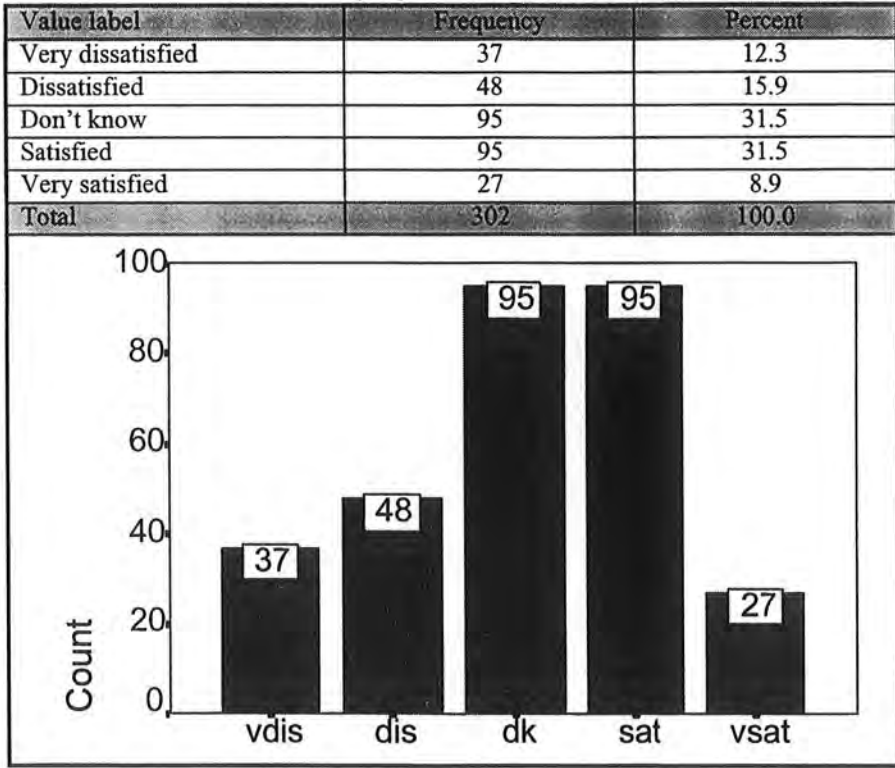
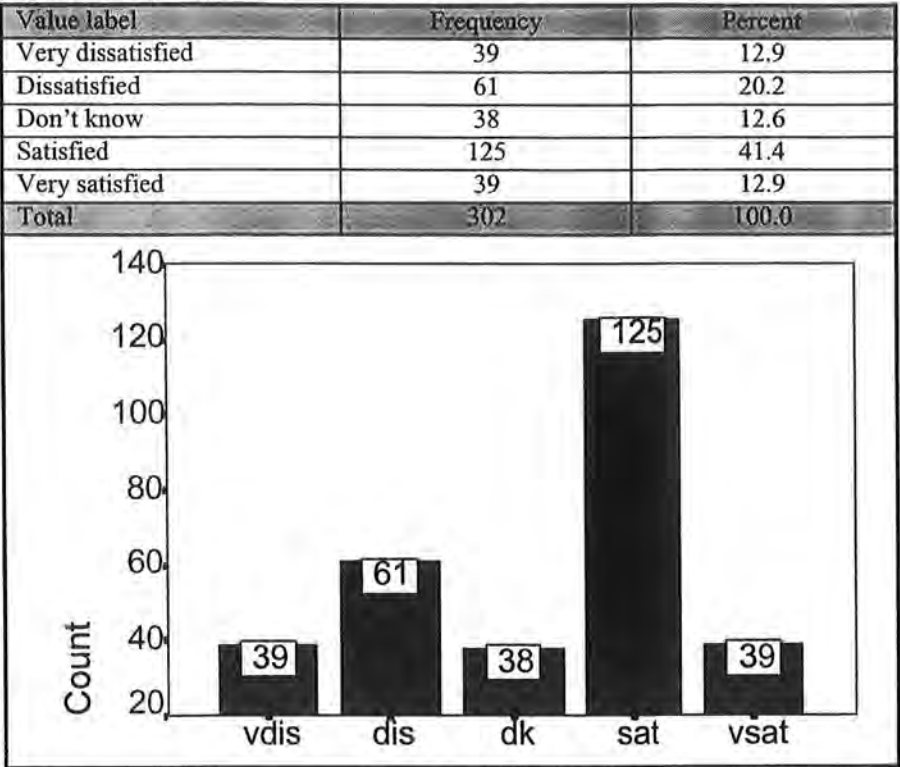


Table and Chart 5.118: The way layoffs and transfers are managed in my job



**Table and Chart 5.119: All in all, to what extent are you satisfied with organisation policy?**



Questions 72, 76 and 77 (Tables 5.112, 5.116 and 5.117) were concerned with the workers' feelings about organisational policies generally, and with the way that they are administered. The responses for all of these questions were similar, with just over 50 percent of employees expressing some degree of satisfaction, a large minority of around a third expressing some degree of dissatisfaction and the remainder of workers (between 13 and 17 percent) expressing uncertainty. The interviews revealed a number of complaints about the offset companies' practices, especially as they affected employees. One respondent said that one of the reasons for dissatisfaction was the hesitation of the companies in meeting the employees' demands for equipment. (The researcher would stress that this was not a common complaint, as one would expect from the very high percentages of satisfaction expressed about equipment in the working conditions section.) Other employees complained about tough regulations, especially with respect to dismissals, and contradicting policies generally. The issue of favouritism was raised again. Some employees complained that there is a distinction between technicians and

administrative employees in the companies. Usually, according to these employees, the administration will meet the demands of the administrative employees and will neglect those of the technicians.) Others complained that work procedures and regulations tend to be implemented arbitrarily sometimes. For example, with respect to promotions, it seems to many of the interviewees as if employees advance on the basis of favouritism rather than qualifications and performance or experience. In an interview an ex-manager in offset companies commented on the uncertainty of administrative policy. He said: "There is no clear-cut policy. What is written in the bylaws is completely different from reality". He added: "Unfortunately there is no serious intention of offering fair rewards or showing appreciation to faithful employees, despite their honesty and dignity. They can be moved from their positions for any reason. Some are forgotten and neglected forever and their previous contributions are not appreciated. Financial incentives are not everything and many people consider respect more valuable than anything else, particularly those who are in high positions." Another official raised the issue of gossip and back-biting, and he described it as a "disease that is spreading among many departments in the offset companies". This causes conflict and does not serve the interests of the companies. The conflict between directors of departments derives from competition between themselves as well as from an absence of clear lines of demarcation between departments. However, it is the responsibility of the top management to keep confrontation to a minimum by various methods, including calling for meetings to give everyone the chance to discuss disagreements. This depends on the type of leadership in the organisation, allowing disagreement to be kept at a healthy level to prevent the situation from deteriorating.

Question 73 (Table 5.113) had to do with feelings concerning the way employees are informed about organisation policies. A somewhat higher percentage of workers (61.6

percent) expressed a degree of satisfaction in this area, but there was still a substantial minority of 28.5 that expressed outright dissatisfaction. In the interviews, there was considerable criticism of the management's lack of communication with employees. More than one respondent complained that the top management often did not distribute new instructions regarding work procedures, and sometimes even prevented employees from seeing these instructions for themselves. Others complained about inconsistency, noting that sometimes the company issues a new instruction for a specific purpose but then, after a short period, issues another that contradicts the previous one. Apparently, the employees are not always informed of the changes in such cases, but are held accountable for resulting problems.

Question 74 (Table 5.114) had to do more specifically with the workers' feelings about the way they are informed about their job performance. The percentages expressed here are very similar to those for Questions 72, 76 and 77, with 50.7 percent of employees reporting that they were satisfied or very satisfied, while nearly a third (33.1 percent) of employees reported some degree of dissatisfaction and 16.2 percent of employees reported being uncertain. Some employees expressed complaints about disagreements between their supervisors and the top administration. It seems that sometimes when a manager or supervisor writes a report about an employee and sends it to the administration, they will change or modify it, either because they do not trust the supervisor's evaluation or because they do not care about his report.

As Table 5.118 (Question 78) shows, there is considerable uncertainty and outright dissatisfaction concerning the way layoffs and transfers are managed by the companies. Only a minority of 40.4 percent expressed a degree of satisfaction with this aspect of organisational policy, while 31.5 percent expressed uncertainty and 28.2 percent

indicated that they were either dissatisfied or very dissatisfied. Mirroring comments that the researcher had encountered previously in the course of examining several of the other job-related factors, respondents being interviewed about this issue explained that sometimes an employee would be fired or transferred in a harsh manner, particularly if he was regarded as troublesome and was accustomed to demanding his rights. In another interview one employee expressed his feelings about the offset companies' policies in this area in the following manner: "there are a number of policies and procedures such as promotion, and staff evaluation, which are not available to employees. The absence of such policies and/or procedures could affect the motivation to do a good job and maintain a high level of performance. Employee's appraisal and promotion are some of the factors, which are very important to us, yet are not clearly defined." Another employee indicated: "I find myself unproductive in my job because I find that I am superfluous in my department. I feel that I have the abilities and talents to be more productive in another department. My present job does not satisfy my educational ambitions, which as a result, I feel, are being stifled. I think I would be more productive if I moved to work in another job. The presence of unproductive staff who have a negative attitude in my department affects the progress of my work. The lack of clarity in my job description and the little work done in my department also affect my progress."

Since one of the primary complaints for Question 78 concerned the fact that qualifications tend not to be taken into account when transfers and promotions are being considered, the researcher performed a crosstabulation between qualification and satisfaction with organisational policies to see if highly qualified workers were less satisfied (or more dissatisfied) than other groups. The data indicates that both satisfaction and dissatisfaction levels tend to be broadly similar across the different

qualification groups, with the exception of the high degree group, which has a considerably higher percentage of satisfaction than the other groups. A further crosstabulation of qualification and job title seems to shed some light on this, as the high degree category is concentrated in the higher ranking positions of supervisor, manager and engineer.

**Table 5.120: Qualification/Organisation Policy Crosstabulation**

Qualification * Organisation policies Crosstabulation						
Qualification		Organisation policies				
		vdis	dis	dk	sat	vsat
elementryschool		1	1	1	4	2
		11.1%	11.1%	11.1%	44.4%	22.2%
	intermediateschool	7	5	3	12	3
		23.3%	16.7%	10.0%	40.0%	10.0%
	secondarieschool	10	17	8	27	7
		14.5%	24.6%	11.6%	39.1%	10.1%
	diploma	8	15	9	27	19
universitydegree		10.3%	19.2%	11.5%	34.6%	24.4%
	highdegree	9	20	15	38	6
		10.2%	22.7%	17.0%	43.2%	6.8%
Total		4	3	2	17	2
		14.3%	10.7%	7.1%	60.7%	7.1%
Total		39	61	38	125	39
		12.9%	20.2%	12.6%	41.4%	12.9%

**Table 5.121: Qualification/Job Title Crosstabulation**

Qualification * Job title Crosstabulation							
Qualification		Job title					
		supervisor	manager	engineer	technician	clerk	security
elementryschool				1	2	2	4
				11.1%	22.2%	22.2%	44.4%
	intermediateschool	5			14	6	5
		16.7%			46.7%	20.0%	16.7%
	secondarieschool	11	1	1	35	16	5
		15.9%	1.4%	1.4%	50.7%	23.2%	7.2%
	diploma	15	3	3	52	4	1
universitydegree		19.2%	3.8%	3.8%	66.7%	5.1%	1.3%
	highdegree	13	25	44	2	4	
		14.8%	28.4%	50.0%	2.3%	4.5%	
Total		4	14	9	1		
		14.3%	50.0%	32.1%	3.6%		
Total		48	43	58	108	32	15
		15.9%	14.2%	19.2%	35.1%	10.6%	5.0%

With respect to the question about the employees' satisfaction with the way their organisation treats them (Question 75/Table 5.115) 59 percent reported being either satisfied or very satisfied. However, 14.2 percent reported uncertainty, while better than one in four employees (26.8 percent) reported being either dissatisfied or very

dissatisfied. In interviews, employees raised points similar to those cited for the other questions in this section of the questionnaire.

Question 79 (Table 5.119) asked the employees to state their overall level of satisfaction with organisational policy. The results seem to reflect a fair aggregate of the responses to the other questions in the section with a majority of 54.3 percent expressing that they were satisfied or very satisfied, while 12.6 percent indicated that they did not know how they felt, and, once again nearly a third (33.1 percent) expressed outright dissatisfaction to some degree.

Since many of the complaints expressed in the interviews in this section seemed to be levelled at supervisors and managers for their apparent failure to communicate with the lower ranking workers about policy, and for their failure to administer policy effectively, consistently and/or fairly, the researcher performed a crosstabulation between job title and organisational policy to see if higher ranking workers would be more satisfied than lower ranking ones. The previous crosstabulations for this section showed that the high degree employees, who are concentrated in the ranking positions, expressed a higher satisfaction percentage than other workers. However, as the following data (Table 5.122) shows, there is not a particularly clear differentiation between the higher and lower job category groups and satisfaction levels, except in the case of clerks, who for some reason have a much higher satisfaction percentage than the other groups.



**Table 5.122: Job Title/Organisation Policy Crosstabulation**

		Organisation policies					Total
		vdis	dis	dk	sat	vsat	
Job title	supervisor	8 16.7%	11 22.9%	2 4.2%	23 47.9%	4 8.3%	48 100.0%
	manager	3 7.0%	8 18.6%	11 25.6%	18 41.9%	3 7.0%	43 100.0%
	engineer	8 13.8%	10 17.2%	8 13.8%	25 43.1%	7 12.1%	58 100.0%
	technician	16 15.1%	23 21.7%	12 11.3%	34 32.1%	21 19.8%	106 100.0%
	clerk		5 15.6%	3 9.4%	23 71.9%	1 3.1%	32 100.0%
	security	4 26.7%	4 26.7%	2 13.3%	2 13.3%	3 20.0%	15 100.0%
	Total	39 12.9%	61 20.2%	38 12.6%	125 41.4%	39 12.9%	302 100.0%

The researcher would suggest, given this data, and the generally fairly high level of satisfaction that was expressed with supervision in the responses from that section of the questionnaire, that the problem is not so much the fact that supervisors and managers are failing to communicate and administer policies (although this may be true in some cases) as it is the fact that, as a general rule, policies are not well enough defined or established to be administered effectively. Several ranking officials made complaints to that effect in the interviews, and the fact that the higher ranking employees' satisfaction and dissatisfaction levels are very similar to those of the lower ranking employees suggests that the supervisors and managers are just as concerned about the situation as the people working under them are. Although over half of the employees surveyed seem to be reasonably satisfied with the existing situation in this area, it seems that there is much room for improvement, especially with respect to policies having to do with promotions, transfers and dismissals.

As the researcher noted in Chapter Three, organisation policies and structure has been identified by a number of scholars as being a very significant factor with respect to job

satisfaction levels (Gilmer, 1966; Locke, 1976; Kossen, 1978; Gruneberg, 1979; Argyle 1989; Knoop, 1995; Finlay, Marin, Roman and Blum, 1995; Wu and Short, 1996; and others). It is worth noting that Herzberg (1993) considered organisation structure and policies to be one of the key hygiene factors, the absence of which generates job dissatisfaction. The organisation policies factor is one which plays a significant role in influencing and determining several other important job-related factors such as pay, promotion, and many aspects of the work itself. Consequently, one would expect this factor to be a very significant component of the overall job satisfaction level in any given work setting.

In order to test the significance of organisational policy in relation to overall job satisfaction levels in the offset companies, the researcher generated the following hypothesis and null hypothesis:

H 2.10 There is a significant relationship between the respondent's general satisfaction with organisation policy and the degree of job satisfaction.

H 0 2.10 There is no significant relationship between the respondent's general satisfaction with organisation policy and the degree of job satisfaction.

A Spearman Correlation Coefficient Two-Tailed Test was then performed, and the researcher found a significance of .430, which is highly significant at .05 level. Therefore, the null hypothesis that there is no significant relationship between respondent's general satisfaction with the organisation policies and the degree of job satisfaction was rejected.

The researcher would argue that the data from this section broadly supports the high overall job satisfaction finding from Question 80. Although a significant number of employees (around a third of those surveyed) were dissatisfied with the way that policies are explained and implemented, a majority of 54.3 percent reported overall satisfaction in this area, and 59 percent reported that they were satisfied to some degree with the way that the organisation treats its employees. Although there were complaints in interviews with workers about a failure on the part of management to implement consistent or fair policies, particularly with respect to transfers, layoffs and promotions, it seems that the problem might not be so much the quality of the supervision (which, as the data showed in Section 5.3.5, 66.5 percent of workers are satisfied with overall) as the lack of clearly defined and well established policies governing these areas. As the researcher demonstrated in Table 5.122, the data for organisational policies showed that supervisors and managers were no more satisfied in this area, on the whole, than lower ranking employees. As we have seen with the responses to several other sections of the questionnaire, including work itself and promotions, workers have consistently expressed concerns that the policies governing training, job security and advancement are based less on qualification or job performance than on seniority or favouritism. The findings in this section reinforce this, and it is clear that this is perhaps the most important area that the offset companies need to work on if they want to maintain and improve the overall job satisfaction levels of the workers.

#### **5.4.11 Job-Related Factors and Job Satisfaction: Summary and Conclusion**

The researcher's aim in this section was to present and analyse the data he obtained from the Part Two of the research questionnaire about the respondents' satisfaction levels with the following job-related factors: work itself; pay; job benefits; recognition; supervision; promotion; working conditions; co-workers; status; and organisation

policies. As the researcher explained both in Chapter Four and at the beginning of this chapter, his third objective for the empirical research project was to determine whether or not there was a significant relationship between these job-related factors, considered individually and collectively, and their overall levels of job satisfaction in the offset companies. In keeping with this objective, the researcher formulated the appropriate hypothesis and null hypothesis for each factor and performed Spearman Correlation Coefficient Two-Tailed Tests to determine which null hypotheses should be accepted or rejected. A summary of the results of these tests is presented in the following table:

**Table 5.123: Correlation Coefficients for Job-Related Factors**

SPEARMAN CORRELATION COEFFICIENTS FOR JOB-RELATED FACTORS*		
Name of factor	Significance	Null Hypothesis
Work Itself	.619	Rejected
Pay	.356	Rejected
Job Benefits	.438	Rejected
Recognition	.512	Rejected
Supervision	.462	Rejected
Promotion	.451	Rejected
Working Conditions	.318	Rejected
Co-workers	.264	Rejected
Status	.467	Rejected
Organisation Policy	.430	Rejected

Taking into account the considerations that he presented in Section 5.2, the researcher supplemented the analysis suggested by the Spearman tests in a number of ways. First, he gave considerable attention to looking at the levels of satisfaction expressed for each factor overall, and for the individual questions looking at different aspects of each factor. This allowed him to gain a better general understanding of the specific areas that workers felt particularly strongly about. Furthermore, the researcher was able to conduct a number of follow-up interviews to probe deeper into the workers’ feelings about each of the different factors, and he was able to concentrate on areas where high levels of satisfaction, dissatisfaction or uncertainty, were particularly evident. Finally, the researcher was able to obtain a better understanding of that data in some areas by

\* A more complete table showing the data as it was summarised in the context of the SPSS program is presented in the next section of this chapter.

performing crosstabulations in SPSS between the different job-related factors and the personal characteristics data from the responses to Part One of the questionnaire. As the researcher explained in each of the job-related factor sub-sections, all of the data from the individual factors, interviews and crosstabulations tended, on the whole, to support the findings of the Spearman tests.

The data presented in this section leads the researcher to conclude that every one of the job-related factors investigated is highly significant in relation to the high overall satisfaction levels that the respondents expressed in their answers to Question 80. As the researcher noted in the summary and conclusion to Section 5.3 the Spearman Correlation Coefficient tests show a much higher significance for the job-related factors, considered both collectively and individually, than for the personal characteristics.

With respect to the work itself, both the Spearman test and the aggregate data support the conclusion that this factor played a particularly significant positive role in the construction of a high overall level of job satisfaction in the offset companies. The correlation coefficient of .619 is the highest for any factor. For all seventeen of the questions in this section, a clear majority of respondents expressed that they were either satisfied or very satisfied with the job characteristic being examined. The researcher would reiterate at this point that he believes that many of the workers are aware of, and experience some fulfilment as a result of the fact that, working in the offset companies places them at the forefront of Saudi Arabia's future development plans. There are many young Saudis who look forward to working in an environment in which they can practice high technology skills and utilise some of the most advanced equipment in the world. This may help to account for the high levels of satisfaction, both in this area and with respect to status. Although some workers, particularly in the lower ranking job

categories expressed dissatisfaction with autonomy and task variety in their jobs, the overall impression is that around two-thirds of workers are satisfied in most areas of work itself. The single exception in this area seems to be related to opportunities and policies regarding training. Only a slim majority of respondents expressed satisfaction in this area, with some interviewees expressing that favouritism plays an undue role in the determination of who is selected to undergo advanced training. This is a theme that recurred in the context of several of the other factors, and the researcher feels that it is clearly an area that the offset companies' administrators need to improve.

With respect to pay, the Spearman test indicated a significance of .356, which is highly significant, but less so than work itself and many of the other factors. As with work itself, a majority of respondents expressed satisfaction for each question in the section. The majorities were not as high as they were for work itself, particularly with respect to Question 28 about the extent to which pay fulfilled personal needs. However, roughly a third of all respondents reported being either dissatisfied or very dissatisfied with respect to every question in this section, so pay is clearly an area where there is room for improvement in the offset companies.

The particular benefits specified in the section of the questionnaire on job benefits were pensions, holidays, medical care, catering, job security, leisure activities and free time. The Spearman Correlation Coefficient Two-Tailed Test indicated a significance of .438 for job benefits overall, placing this factor sixth out of ten in terms of significance with respect to the overall level of satisfaction. As the response to the question on overall satisfaction with respect job benefits did produce a clear majority of 56.6 percent, it seems that benefits probably have contributed to a high level of overall satisfaction to some extent. However, the overall percentage of dissatisfied or very dissatisfied

workers was also fairly high (29.2 percent), and perhaps more tellingly, the workers expressed a majority percentage of dissatisfaction with the pension scheme, and substantial levels of either dissatisfaction or uncertainty in virtually every other area except medical services. Some aspects of this factor, particularly the widespread lack of understanding or satisfaction with respect to the pension scheme and the perceived lack of job security, probably require some attention on the part of the offset companies' respective administrations.

The Spearman Correlation Coefficient for recognition was .512, the second highest value for any factor after work itself. As the researcher indicated, the section on recognition was not intended to measure recognition in terms of status, pay, promotions or other tangible rewards for good work, so much as it was concerned with the day-to-day interaction between employees at different levels of the offset companies. Although a majority of employees expressed satisfaction in this area, the majority was not particularly high with only 52.3 percent expressing some degree of satisfaction, and roughly a third (33.8 percent) expressing outright dissatisfaction. Clear majorities of workers were satisfied with the feelings of accomplishment and fulfilment that they derived from their jobs, and a very high majority of the respondents felt either satisfied or very satisfied with the recognition they received from their co-workers. Although roughly half of workers expressed satisfaction in other areas, such as being given recognition or praise by superiors as a result of good performance, considerable minorities of up to a third expressed some degree of dissatisfaction with these aspects of recognition. A considerable number of employees indicated in interviews that they felt that their supervisors and managers did not express enough appreciation for their work, and a crosstabulation of job title and recognition showed that the respondents who were either supervisors or managers reported higher levels of satisfaction with recognition

than lower ranking employees. The researcher feels that, based on these results, the supervisors and managers in the offset companies should be urged to express more frequently their appreciation for the work that the employees working under them are doing.

Supervision was found to have a significance of .462 as a result of the Spearman test, ranking it fourth among job-related factors in terms of overall satisfaction. The researcher feels that the responses to this section of the questionnaire and the subsequent interviews strongly and clearly support the high overall satisfaction finding for the offset companies. With respect to the question concerning overall satisfaction with supervision a reasonably high majority of 66.5 percent of workers expressed some degree of satisfaction. Better than a quarter of all respondents (25.8 percent) indicated that they were very satisfied. For all but one of the questions in this section (the question concerning training) a clear majority of the respondents expressed some degree of satisfaction. A minority of workers expressed dissatisfaction for each of the different aspects of supervision that were tested in the questionnaire. A variety of different complaints were voiced in interviews. The one complaint that seems to stand out is a feeling among a significant number of workers that supervisors in the offset companies show too much favouritism with respect to training and advancement. As the researcher noted, this complaint was also expressed in the context of work itself.

The Spearman Correlation Coefficient for the next job-related factor investigated, promotion, was found to be .451, placing it fifth of the ten factors in terms of significance with respect to overall satisfaction. In interviews many workers indicated that this was one of the most important areas for them, but the data from this section of the questionnaire probably did not contribute positively to the high overall level of



satisfaction for the offset company employees, because, when questioned about their overall satisfaction with promotion, more workers (43.7 percent) expressed outright dissatisfaction than expressed satisfaction (35.5 percent). Better than one in five workers (20.9 percent) expressed uncertainty. Similar figures were reported for every single question in the section, and in the follow-up interviews most workers complained either that promotions were awarded based on seniority rather than performance and qualifications, or that promotions were awarded based on favouritism or self-interest on the part of supervisors and management. Clearly, this is an area where the companies' administrators need to change their policies and try to improve worker satisfaction levels.

With respect to working conditions, the Spearman test indicated a significance of .318 with respect to overall job satisfaction levels, which ranks ninth among the ten factors investigated. Although the satisfaction levels expressed for all of the questions in this section were uniformly very high (around 80 percent, with over a quarter of all respondents reporting that they were very satisfied with most aspects), it may be that a number of employees do not really consider working conditions to be particularly important with respect to their overall satisfaction. In conducting interviews, the researcher noted that few employees felt a need to talk about working conditions, and were more concerned with factors such as the work itself, pay and the promotion system. Of course, if the facilities and equipment were not adequate, it is probable that the employees would have assigned a higher value to this area. This may validate to some extent Herzberg's notion (detailed in Chapter Three) that there are some factors that do not really contribute to satisfaction if they are present and adequate, but which generate dissatisfaction if they are absent or inadequate.

The next factor investigated, status, was found to have a Spearman Correlation Coefficient of .467, ranking it third in significance among the ten job-related factors. As the researcher expressed previously, he would have expected the workers to be pleased with status because working for the offset companies is perceived by many Saudis to be both important for the nation's future and indicative of a high level of personal competence in the area of advanced technology. Although high levels of uncertainty were expressed with respect to status accruing to workers families and status derived from interacting with important people, a clear majority of 61.6 percent of workers were satisfied with the personal status they derived from employment in the offset companies.

With respect to the final job-related factor, organisation policies, the Spearman Correlation Coefficient Two-Tailed Test indicated a significance of .430, ranking it seventh out of the ten factors with respect to the overall satisfaction level. Although a significant number of employees (around a third of those surveyed) were dissatisfied with the way that policies are explained and implemented, a majority of 54.3 percent reported overall satisfaction in this area, and 59 percent reported that they were satisfied to some degree with the way that their organisation treats its employees. Although there were complaints in interviews with workers about a failure on the part of management to implement consistent or fair policies, particularly with respect to transfers, layoffs and promotions, it seems that the problem might not be so much the quality of the supervision as the lack of clearly defined and well established policies governing these areas. As the researcher demonstrated in Table 5.122, the data for organisational policies showed that supervisors and managers were no more satisfied in this area, on the whole, than lower ranking employees. As the concerns the workers expressed in this section with regard to training job security and worker transfers and promotions

mirrored their complaints in a number of other sections, including work itself, supervision and promotion, it is clearly a high priority that firmer and better developed policies should be formulated and implemented by the offset companies in these areas. This seems to be the single most important area where improvement is definitely needed.

## **5.5 Conclusion**

The purpose of this chapter was to present the data obtained from the responses to the research questionnaire and the subsequent interviews, along with the researcher's analysis thereof. As the researcher explained, the empirical research project he conducted in the context of the three selected Saudi offset companies had three objectives. The first objective was to measure the overall level of job satisfaction in the three selected offset companies. The other two objectives involved assessing the relative significance, both collectively and individually, of the personal characteristics and work-related factors that the researcher identified as being potentially important in the course of his review of the existing literature on job satisfaction. More specifically, the second objective was to determine the extent to which the workers' personal characteristics contributed to the overall level of satisfaction. And the third objective was to determine the extent to which the selected job-related factors contributed to the overall level of satisfaction. The chapter was organised in such a way as to treat each of the three objectives in turn.

Section 5.2 was concerned with reporting, and considering the validity of, the overall level of worker satisfaction in the offset companies, as it corresponded to the responses to Question 80, the final question in the questionnaire. The responses to Question 80 showed a very high overall level of job satisfaction among the respondents. Of the 302

respondents, 151 employees, or exactly 50 percent, reported being satisfied with their job. A further 67 employees (22.2 percent) were very satisfied. Furthermore, of the remaining 84 employees, 11.6 per cent were neutral in their answer. Consequently those who responded that they were dissatisfied overall constituted only 10.9 percent of the total and those who were very dissatisfied constituted only a further 5.3 percent of the total. These results surprised the researcher, because his impression before conducting the study was that there was considerable dissatisfaction overall among Saudi nationals working for the offset companies.

The researcher proceeded to consider the validity of the baseline data from Question 80 in terms of the findings of other scholars and in terms of his understanding of the possible implications of Saudi and Islamic culture. He observed that many scholars (including: Quinn and Staines, 1979; Furnham 1992; Organ and Lingl, 1995; Dekker, Barling and Kelloway, 1996; and Pool, 1997) have commented that, irrespective of other considerations, high percentages of workers tend to express overall satisfaction in surveys. This is perhaps particularly the case during recessed economic conditions, in which workers are less likely to risk their jobs by expressing complaints due to the lack of availability of alternative jobs. These economic conditions applied in the case of Saudi Arabia in 1998 when the survey data was collected. Furthermore, the researcher considers it possible that aspects of Saudi and Islamic culture might have inhibited the workers to some extent with respect to expressing overall dissatisfaction. The researcher proceeded to observe, however, that, to at least some extent, scholars are required to take a leap of faith and trust that their data is reasonably valid. However they should attempt to strengthen their conclusions wherever possible by carefully considering the data presented with respect to the individual factors, and supplementary data such as that provided by follow-up interviews, etc. The researcher noted that he took such steps

in the course of his analysis for this study, and found that the data for the individual sections of the questionnaire tended to support the overall finding from Question 80 to a very great extent.

In Section 5.3, the researcher proceeded to present and analyse the data on personal characteristics with a view to establishing their significance in relation to overall job satisfaction in the offset companies. The personal characteristics considered included: age; monthly income; years in current job; years in work overall; qualifications; job title; and marital status. Table 5.124 at the end of this section is a summary from SPSS of the Spearman Correlation Coefficient significance findings for these characteristics. Generally speaking, these, along with a careful analysis of the aggregate data, led the researcher to conclude that the personal characteristics, taken as a whole, were not particularly significant (and much less significant than the job-related factors) in terms of the overall level of satisfaction in the offset companies. However, some of the characteristics, including monthly income, job title, experience in current job and level of qualification were found to be somewhat significant at the .05 level established as the basic parameter for the study.

In Section 5.4, the researcher presented and analysed the data on job-related factors with a view to establishing their significance in relation to overall job satisfaction in the offset companies. The job related factors included: work itself; pay; job benefits; recognition; supervision; promotion; working conditions; status and organisation policies. Table 5.125 at the end of this section is a summary from SPSS of the Spearman Correlation Coefficient significance findings for these factors. These findings, along with a careful analysis of the data from each section, and of the supplementary data from interviews, led the researcher to conclude that the job-related

factors are highly significant in relation to the overall job satisfaction level, both collectively and individually. Work itself, recognition and status were found to have the highest significance, but every job-related factor was highly significant at the .05 level. The researcher also identified in this section several important problem areas that are generating considerable dissatisfaction. The most important problem area was the workers' general dissatisfaction with the offset companies' policies and practices with respect to training, transfers, dismissals, and (especially) promotions. Some other problems were uncovered with respect to: 1) job benefits, especially the pension system, which apparently has not been explained to the workers and which most are unhappy with; 2) pay, which nearly a third of workers felt was not adequate for fulfil their needs; and 3) recognition, with many lower ranking employees expressing the feeling that their supervisors and managers do not do enough to make them feel as if their work is appreciated.

Table 5.124: Spearman Correlation Coefficients for Personal Characteristics

	Overall job satisfaction	Age	Monthly income	Years in current job	Years in all jobs	Qualification	Job title	Marital status
Overall job satisfaction	1.000	.013	.181**	.117*	.021	.110	-.132*	-.031
N	302	302	302	302	302	302	302	302
Age	.013	1.000	.536**	.349**	.528**	.248**	-.294**	-.498**
N	302	302	302	302	302	302	302	302
Monthly income	.181**	.536**	1.000	.325**	.304**	.701**	-.529**	-.330**
N	302	302	302	302	302	302	302	302
Years in current job	.117*	.349**	.325**	1.000	.382**	.194**	-.301**	-.295**
N	302	302	302	302	302	302	302	302
Years in all jobs	.021	.528**	.304**	.382**	1.000	.018	-.209**	-.347**
N	302	302	302	302	302	302	302	302
Qualification	.110	.248**	.701**	.194**	.018	1.000	-.537**	-.088
N	302	302	302	302	302	302	302	302
Job title	-.132*	-.294**	-.529**	-.301**	-.209**	-.537**	1.000	.190**
N	302	302	302	302	302	302	302	302
Marital status	-.031	-.498**	-.330**	-.295**	-.347**	-.088	.190**	1.000
N	302	302	302	302	302	302	302	302

\*\* . Correlation is significant at the .01 level (2-tailed).

\* . Correlation is significant at the .05 level (2-tailed).

Table 5.125: Spearman Correlation Coefficients for Job-Related Factors

	Overall job satisfaction	Work itself	Pay	Job benefits	Recognition	Supervision	Promotion	Working condition	Co-workers	Status	Organisation policies
Overall job satisfaction	1.000	.619**	.356**	.483**	.512**	.462**	.451**	.318**	.264**	.467**	.430**
N	302	302	302	302	302	302	302	302	302	302	302
Work itself	.619**	1.000	.339**	.467**	.500**	.476**	.450**	.301**	.251**	.452**	.428**
N	302	302	302	302	302	302	302	302	302	302	302
Pay	.356**	.339**	1.000	.592**	.439**	.250**	.398**	.213**	.196**	.418**	.413**
N	302	302	302	302	302	302	302	302	302	302	302
Job benefits	.483**	.467**	.592**	1.000	.597**	.439**	.525**	.378**	.201**	.492**	.594**
N	302	302	302	302	302	302	302	302	302	302	302
Recognition	.512**	.500**	.439**	.597**	1.000	.499**	.665**	.354**	.227**	.608**	.655**
N	302	302	302	302	302	302	302	302	302	302	302
Supervision	.462**	.476**	.250**	.439**	.499**	1.000	.467**	.258**	.138*	.320**	.539**
N	302	302	302	302	302	302	302	302	302	302	302
Promotion	.451**	.450**	.398**	.525**	.665**	.467**	1.000	.201**	.135*	.545**	.545**
N	302	302	302	302	302	302	302	302	302	302	302
Working condition	.318**	.301**	.213**	.378**	.354**	.258**	.201**	1.000	.403**	.350**	.383**
N	302	302	302	302	302	302	302	302	302	302	302
Co-workers	.264**	.251**	.196**	.201**	.227**	.138*	.135*	.403**	1.000	.267**	.226**
N	302	302	302	302	302	302	302	302	302	302	302
Status	.467**	.452**	.418**	.492**	.608**	.320**	.545**	.350**	.267**	1.000	.538**
N	302	302	302	302	302	302	302	302	302	302	302
Organisation policies	.430**	.428**	.413**	.594**	.655**	.539**	.545**	.383**	.226**	.538**	1.000
N	302	302	302	302	302	302	302	302	302	302	302

\*\* Correlation is significant at the .01 level (2-tailed).

\* Correlation is significant at the .05 level (2-tailed).



## **Chapter Six: Conclusions and Final Discussion**

### **6.1 Introduction**

The purpose of this chapter is to provide a summary of the study's overall findings, to consider briefly some issues raised by the study and to conclude the study. The chapter has two sections in addition to this one, and is organised as follows. Section 6.2 provides a brief chapter-by-chapter summary of the study, looking at the objectives and the organisation of each chapter in turn and presenting a summary of the study's overall conclusions as they were developed throughout the course of the various chapters. The final section, Section 6.3, presents a brief discussion of some issues which were raised by the study, but not treated in detail elsewhere.

### **6.2 Summary and Conclusions of the Study**

#### **6.2.1 Chapter One: Introduction**

The first chapter introduced the study by: 1) presenting a brief overview of the Kingdom of Saudi Arabia's Economic Offset Program; 2) stating the problem that concerned the researcher and describing the overall purpose and objectives of the study; 3) explaining the methodology of the study and considering its principal limitations; and 4) outlining the overall organisation of the study.

Section 1.1 presented an overview of the Kingdom's Economic Offset Program, looking first at the concept of offsets and establishing the distinction, in terms of both the purpose and characteristics, of the two different kind of offsets: direct offsets and indirect offsets. The researcher proceeded to briefly explain the circumstances and

objectives behind the establishment of the Kingdom of Saudi Arabia's Economic Offset Program in 1984. The researcher observed that, unlike previous offsets that had been established elsewhere, which tended to be direct offsets designed to reduce the cost of defence purchases or to help the purchaser to develop or maintain its own defence-industrial capabilities, the Kingdom's Program was an indirect offset designed to provide a sound basis for the economic diversification of the Saudi economy, more specifically, the development of high technology industrial capabilities outside of the oil and defence sectors. The researcher proceeded to give a brief listing and description of the seven individual offset programs established under the auspices of the overall Economic Offset Program since 1984. He observed that, although each of the seven programs was negotiated individually, with different specific terms and conditions ultimately being agreed upon for each, the fundamental goals and objectives of the overall Economic Offset Program have been effectively the same throughout its existence. He summarised these as follows:

1. the expansion the Kingdom's industrial base, particularly in terms of diversification away from oil;
2. the creation of investment opportunities outside defence-related fields for the private business sector;
3. the development of, and the generation of employment for, experienced Saudi technical, professional, and managerial manpower;
4. the provision of competitive substitutes for imported systems, equipment, goods and services;
5. the manufacture of products in the Kingdom which have export potential;
6. the rational use of Saudi resources, including capital and energy; and

7. the establishment of service industries that enhance, develop, support or maintain the Saudi economic infrastructure.

The researcher proceeded to consider the significance of the Economic Offset Program, and argued that, for a number of reasons, it is one of the most potent tools the Saudi government has at its disposal to bring about both the necessary diversification away from oil and the generation of employment for Saudi nationals, on which the long-term economic health of the country depends. Consequently, any considerations that may affect the prospects for success of the overall Program, or of the offset projects and companies that have been developed through it, are potentially very significant.

The researcher proceeded from this concluding point of the first section, to begin Section 1.2 by explaining that the principal purpose of the study was to examine one such problem: the apparent job dissatisfaction that he had encountered among Saudi employees of the offset companies in his dealings with them as director of Land Force public relations in the Ministry of Defence and Aviation. The researcher noted that he considered this problem, like any other problem associated with the Economic Offset Program, to be potentially very significant, but that, unfortunately, until this study, the job satisfaction issue has not really received adequate consideration, and little has been done in terms of: 1) measuring the extent of dissatisfaction in the offset companies; 2) trying to understand its underlying causes 3) considering its potential significance; or 4) taking appropriate steps to improve worker satisfaction levels. The researcher proceeded to explain that the primary purpose of this study was to address these previously neglected issues in two ways: first, by considering the underlying causes, and the

practical consequences, of job satisfaction and job dissatisfaction in light of the considerable body of theoretical and empirical literature that has been produced to address the subject in settings outside the Saudi economic offset companies; and second, and more importantly, through presenting the results of an empirical research project carried out by the researcher in three of the more developed Saudi offset companies and designed with two objectives in mind: 1) to measure the overall levels of job satisfaction in the offset companies; and 2) to identify the most significant causal factors associated with these levels. The researcher noted that he hoped the study would not only help to address the apparent problem of job dissatisfaction in the offset companies, but would also contribute to the overall research on job satisfaction in two ways. First, since not many studies have been done in the developing world generally, or Saudi Arabia specifically, he hoped that his study would help other researchers to develop an understanding of how Western theories and models of job satisfaction can be applied in such settings. He also expressed his hope that the research would help to inspire more studies of job satisfaction the developing world, and Saudi Arabia particularly. Second, the researcher noted that his approach to identifying the significant factors associated with job satisfaction was broader-based than those of many other scholars. While most previous studies of job satisfaction have considered only a few of the large number of potential factors related to job satisfaction, the researcher incorporated quite a few factors, and all three of the important kinds of factors (i.e., personal factors, “intrinsic” factors related to the nature of the work itself, and “extrinsic” factors related to the work environment and/or work context), into his investigation. He would strongly argue that it benefited significantly as a result of this. Consequently, other researchers may want to employ broader-based approaches in future studies of job satisfaction.

Section 1.3 was devoted to explaining the study's overall methodology. The researcher noted that, in order to meet the primary objective of measuring the level of job satisfaction in the offset companies and identifying the most significant factors associated with it, he employed the following five steps: 1) he conducted a literature review on job satisfaction in order to gain a better understanding of the subject and to establish the necessary theoretical grounding for the empirical research project; 2) he developed and tested a questionnaire specifically for the empirical research project that was designed to measure job satisfaction in the offset companies and to identify the factors associated with it; 3) he distributed the questionnaire to employees in the three Saudi offset companies that he selected because they were among the most established and fully developed of the companies; 4) he analysed the data provided by the responses to the questionnaire; and 5) he supplemented his knowledge in critical areas suggested by the data analysis through conducting interviews with officials and employees in the three offset companies. In addition to providing some explanatory comments with respect to each of these steps, the researcher noted that one of the most significant limitations of the study is that tested only the Saudi nationals working in the offset companies and did not test the expatriate employees who are currently working in them, helping with training and development and preparing the ground for the eventual complete Saudisation of the companies. The researcher noted that the job characteristics and possibly also the values and expectations of the expatriate workers are somewhat different from those of the Saudi nationals, and consequently, he considered it to be impractical to include both groups in the context of this study. Given this limitation, he focused primarily on the Saudi nationals because they are the workers on whom the

long-term success of the offset companies, and of the Economic Offset Program as a whole, will ultimately depend. The researcher added that he felt that it was, perhaps, particularly important at this early stage in the companies' development to identify any problems that are troubling the Saudi workers, so that they can be dealt with, and the long-term prospects of the companies improved thereby.

Section 1.4 simply described the overall organisation of the study, listing the remaining five chapters and making some brief comments to explain their objectives and organisation.

### **6.2.2 Chapter Two: Background Information Concerning the Saudi Economic Offset Program**

The purpose of this chapter was to present information to help the reader develop a better understanding of the overall Economic Offset Program, the individual offset programs developed within the context of the Program, and the resulting offset companies, that form the setting for the research on job satisfaction which was presented in the balance of the study. The chapter examined the following important issues: 1) the development and implementation of the existing individual offset programs; 2) the administration of the Economic Offset Program and the government's development objectives for future individual offset programs; 3) the achievements of the Economic Offset Program to date, and its significance in relation to the Kingdom's economic future and 4) recent and emerging trends that might affect the future prospects of the Economic Offset Program.

Section 2.2 presented descriptions of, and information on, the individual offset programs that have been developed to date within the context of the overall Program. The Kingdom has had seven different programs, involving contractors from the US, the UK, and France. The first was the Peace Shield I Offset Program established in 1984 as part of the US contract for the Peace Shield Command and Control Program. The second was the Al Yamamah Offset Program, the British offset program developed out of the project called "Al Yamamah," initiated in September 1985, under which the Royal Saudi Air Force (RSAF) would acquire Tornado, Hawk and PC-9 aircraft together with associated weapons, equipment and support. The third was the Peace Shield II Offset Program established in July 1991, when Hughes Aircraft Co. of the US won the contract for the second phase of the Peace Shield Program, taking over from the Boeing Co. The fourth was the General Dynamics Economic Balance Program, which was associated with Saudi Arabia's purchase, in 1992, of M1A2 Abrams Main Battle Tanks. The fifth was the McDonnell Douglas Offset Program, which was associated with that company's contract to supply F-15 fighter aircraft to the Kingdom. The sixth was the Sawari Offset Program, developed with France in 1990 and applied to a subsequent contract for the supply of two Lafayette class frigates to the Saudi navy. The seventh was the AT&T Offset Program, the first non-military offset project in Saudi Arabia, associated with a contract awarded by the Ministry of PTT to AT&T of the US. in 1994 for the expansion project (TEP-6) and (GSM) system.

Section 2.3 supplied information about the economic offset projects, including the first five offset companies: Advanced Electronics Company, Al Salam Aircraft Co. International Systems Engineering, Aircraft Accessories and Components Co, and

Middle East Propulsion Co. The section proceeded to provide details about the Al Yamamah Offset Projects: Glaxo Saudi Arabia, United Sugar Company, Saudi Development & Training Co, Cyclar Project, Dhahran Harco Chemical Industries Ltd, Rezayat Flover CO Ltd, and Cumene Manufacturing Facility Project. The Peace Shield II Offset Projects, particularly the Middle East Battery Co. were also detailed, as were the Sawari Offset Projects including: Dahab Co Ltd, AL Bilad Catalyst CO Ltd, and Arabian Meter Co

Section 2.4 examined the administration of the Saudi Economic Offset Program, identifying, and providing information about, the organisational units developed by the government to oversee the Program. These are: the Ministerial Committee, the Executive Economic Offset Committee (EOC), the Economic Offset Secretariat (EOS), and Saudi-UK Joint Offset Team. The section also considered the guidelines established by the EOC for the development of future individual offset programs.

Section 2.5 assessed the achievements of the Economic Offset Program to date, paying particular attention to: the new technologies and new industries which it has introduced; the affect it has had on Saudi Arabia's status as an importer and exporter of non-oil goods and services; the training and employment opportunities it has generated; and the clear potential it has demonstrated for attracting future investment into the Kingdom.

Finally, Section 2.6 presented information on recent and emerging trends and developments that may affect the future progress of the Economic Offset Program. These included: some prospective contracts likely to involve offset obligations; the



government's efforts to further enhance offset investment and development; increasing cooperation and collaboration within the offset community; and, an increased emphasis on the training and development of Saudi manpower.

### **6.2.3 Chapter Three: A Review of Literature on Job Satisfaction**

The main purpose of this chapter was to examine the nature, the underlying causes and the potential consequences of job satisfaction: 1) in order to develop some understanding of these crucial issues; and 2) to establish the theoretical context for the empirical research project. The researcher proceeded to present a literature review including: 1) some of the more influential theories of job satisfaction; and 2) significant empirical studies conducted by other researchers to determine the most significant job satisfaction factors in different work settings.

Section 3.2 looked at the existing definitions of job satisfaction presented by different theorists. The section presented a brief survey of some of the more significant definitional issues, including: the level of definitional complexity; the focus on worker attitudes or on the fit between worker attitudes and organisational attitudes; and the importance and nature of the distinction between job satisfaction and job dissatisfaction. The section proceeded to examine in detail the importance of distinguishing job satisfaction from related concepts such as motivation and morale.

With respect to the definitional issues, the researcher indicated that he prefers to define job satisfaction in fairly general terms as the attitude that a worker has about his job. He would agree that this attitude is strongly linked to causal factors but would argue that it

is difficult to incorporate specific factors into one's definition because individual workers' circumstances, needs and values vary. The researcher agreed with the theorists who associated job satisfaction with the presence or absence of a good fit between the worker's goals and attitudes and the goals and attitudes of the employing organisation. The researcher noted that he did not see the need for a clear terminological distinction between job satisfaction and job dissatisfaction. He prefers to view the term job satisfaction as describing a range of attitudes that includes both positive attitudes and negative attitudes towards work. Consequently, when the researcher uses the term job dissatisfaction in the context of this study, he means simply a low level of job satisfaction, not a state that is the opposite of job satisfaction.

With respect to distinguishing motivation from job satisfaction, the researcher argued that motivation, when defined in terms of the needs and values that cause individual workers to do their jobs, is a crucial concept for understanding workers' behaviour and attitudes. Job satisfaction, by contrast, is the concept that describes the attitude that workers have based on their ability to fulfil their motivations through their jobs. Since an understanding of the former is a necessary key to understanding and promoting the latter, it is natural that theory of motivation and theory of job satisfaction are closely related topics. With respect to the distinction between job satisfaction and morale, the researcher observed that there is no clear consensus, but indicated that he would adopt the useful conceptualisation employed by many theorists that morale is a term that should be applied to group attitudes, while the term job satisfaction should be used to describe the attitudes of individual workers.

In Section 3.3 some of the more influential and significant theories of job satisfaction were presented in some detail. These included: Maslow's Needs Hierarchy Theory; Herzbergs' Two Factor Theory; Vroom's Expectancy Theory; Adams' Equity Theory; Lawler's Comparison Model; and Locke's Value Theory. From these, and the other theories presented in the section, the researcher drew the following general conclusions about job satisfaction:

1. Employees seek to fulfil their needs as individual human beings by a number of different means. For many, jobs are either a necessary, or a popular and attractive, way of fulfilling these needs.
2. The level of a worker's job satisfaction is largely determined by various factors which are related to: 1) his individual circumstances, needs, values and preferences; 2) the nature of his work itself; and 3) his work environment and the degree of fit between his motivations and goals and the employing organisation's motivations, goals, and policies.
3. There are differences between individual employees in terms of the amounts and kinds of outcomes or needs they seek to fulfil. One employee might place a primary value on pay, while another would be more concerned with increased recognition, and so on.
4. Employees' expectations of, and aspirations concerning, their outcomes play a significant role in determining their level of job satisfaction. If employees receive outcomes that are in line with their expectations, a good level of job satisfaction will result.
5. The level of an individual worker's satisfaction is also shaped by a comparison process that involves his perceptions concerning: 1) his own job inputs, in terms of

education and training, experience, amount of work, job performance, etc.; 2) the inputs of other employees in similar positions; 3) his outcomes, in terms of the standards of pay and other rewards; and 4) the outcomes of other employees in similar positions. The greater the level of perceived equity, or fairness, in relation to all employees' inputs and outcomes, the higher the level of job satisfaction is likely to be.

In Section 3.4, the researcher drew together a significant number of theories and empirical studies about job satisfaction to explore the factors associated with high and low levels of job satisfaction. The general lack of agreement among theorists and researchers relating to which factors are most significant, particularly in terms of the conclusions of different empirical studies, made it difficult for the researcher to know which factors to concentrate on. This difficulty was greater still because his empirical research project concerned a work setting somewhat different from those previously included in research. However, the researcher observed that, taken collectively, the existing literature presents a broad composite list of potential factors worthy of inclusion in his study. He identified and classified these as follows:

1. Personal Factors (or Characteristics)-- including, among other possible factors, age and experience, gender, level of education, and personality traits; and
2. Job-Related Factors-- which can be further sub-divided into two groups
  - a) Intrinsic Factors, related to the nature of the work itself, such as opportunities for using skills and abilities, opportunities for learning new things, creativity, task

variety, task difficulty, amount of work, responsibility, performance pressure and autonomy

- b) Extrinsic Factors, related to the work context or work environment, such as pay, working condition, supervision, work group, recognition, promotion and organisation characteristics and policy

Finally, in Section 3.5, the researcher considered the conclusions of many theorists and researchers concerning the potential consequences of high and low job satisfaction levels. The researcher examined the relationship between job satisfaction and job performance, and also looked at the relationship between low levels of job satisfaction and problems such as absenteeism and staff turnover.

The researcher observed that the consensus within the existing literature is that the relationship between job satisfaction and performance is not as clear-cut and direct as many people might assume. High job satisfaction and high performance do not seem to be directly related. However, there does seem to be a direct relationship between high motivation and high performance. As motivation and job satisfaction are related, there is a concurrent, indirect relationship between job satisfaction and job performance. The anticipated satisfaction of desired rewards produces high motivation. If the worker's desires are actually satisfied, this will produce job satisfaction, which may contribute to an expectation that other desires will be similarly satisfied, and thus contribute to worker motivation. As long as the job offers new rewards in terms of the worker's needs and values, motivation and high performance can be sustained. However, a high level of satisfaction can only be maintained if the rewards are actually achieved. A sustained

failure to receive expected outcomes will not only reduce the job satisfaction level, but is also likely to reduce the level of a worker's motivation and performance.

The researcher found more support in the literature for the idea that low levels of job satisfaction contribute to problems such as absenteeism and staff turnover. The direct relationship between absenteeism and job dissatisfaction seems to be consistent, but relatively weak. Other factors, such as personal characteristics and circumstances, also contribute to absenteeism. Furthermore, the level of absenteeism is likely to depend on the worker's perception of the consequences. If the organisation punishes absenteeism, and/or if the worker cannot afford to risk his job, the level of absenteeism is likely to be low even if the level of job satisfaction is not particularly good. Job dissatisfaction is also related to absenteeism indirectly, as it can contribute to unfavourable emotional symptoms such as tension headaches, emotional disorder, difficulty in sleeping and emotional breakdown, all of which are underlying causes of absenteeism. There seems to be a stronger direct relationship between job dissatisfaction and staff turnover. However, this relationship is obviously dependent to at least some extent on the availability and desirability of other jobs.

#### **6.2.4 Chapter Four: The Methodology of the Empirical Research Project**

This chapter is concerned with describing the methodology that the researcher employed in the course of designing and conducting the empirical research project. It considered the following issues: 1) the choice of the questionnaire method for measuring job satisfaction; 2) the design and development of the research questionnaire used in the study and the pilot study employed to test the questionnaire; 3) the distribution of the

questionnaire and the difficulties encountered with respect to obtaining the responses; 4) the techniques of statistical analysis applied to the data obtained from the responses to the questionnaire; and 5) the incorporation of interviews to supplement the data obtained from the responses to the questionnaire.

In Section 4.2, the researcher considered briefly the different techniques that scholars and researchers have used to measure job satisfaction in various work settings. These include: interviews; group meetings; rating scales; critical incident assessments; and questionnaires (Riggio, 1990). The researcher observed that, in essence, all of these techniques are based on the assumption that the best way to measure worker satisfaction is to question the workers directly about their attitudes. Other less direct techniques have been developed, but have not been widely used. The researcher proceeded to discuss the relative strengths and weaknesses of the different techniques, and stated that he chose the questionnaire as the primary means of measuring job satisfaction for the purposes of the study because he agreed with the conclusions of several researchers, including Al-Nasr (1999), Bryman and Cramer (1994), and Luthans (1989), who all found the questionnaire method to be the best and most efficient way of measuring job satisfaction. These researchers observed that the use of the questionnaire as the main tool in such research has three important advantages over other methods such as interviews and group meetings:

- 1) it is relatively objective because all respondents answer exactly the same question;

- 2) respondents are more likely to answer honestly because they can remain anonymous; and
- 3) it makes it possible to gather and process a wide range of data from a large number of respondents easily and quickly.

The researcher added that, since the questionnaire method has been very widely used, it should be possible to make substantive comparisons between this study and both future and previous studies of job satisfaction.

In Section 4.3, the researcher described the development and testing of the unique research questionnaire that he used in the course of the empirical research project. Section 4.3.1 explained the researcher's decision to develop a unique research questionnaire by examining: 1) the researcher's desire to include a larger number of potential satisfaction factors, and a greater number of questions on different aspects of these factors, than existing standardised surveys have; and 2) the need to adapt the questionnaire to the Saudi, Arabic and Islamic culture of the work setting being studied. Section 4.3.2 provided general comments on the design of the questionnaire. Section 4.3.3 defined the questionnaire's three objectives: 1) to determine the overall level of job satisfaction in the three selected offset companies; 2) to determine the significance of personal characteristics such as age, marital status, etc., in relation to the overall level of job satisfaction; and 3) to determine the significance of job-related factors such as work itself (the intrinsic factor) along with extrinsic factors such as pay, promotion, etc., in relation to the overall level of job satisfaction. Section 4.3.4 described the content of



the questionnaire in some detail. And Section 4.3.5 explained the procedure and results of the pilot study that the researcher employed to test the questionnaire.

Section 4.4 described the procedure employed with respect to the distribution of the questionnaire, considered the obstacles encountered with respect to obtaining the responses, and reported on the final level of response. The researcher explained that he distributed 450 copies of the questionnaire to employees in all of the different job categories through the personnel directors of the three selected offset companies, namely: 1) Advanced Electronics Company (AEC); 2) Al Salam Aircraft Company (ASAC); and 3) International Systems Engineering (ISE). He encountered some employees who misinterpreted the intent of the questionnaire and who attempted to sabotage the distribution, some employees who did not take the research seriously, and some other employees who were reluctant to answer because they feared that critical comments would adversely affect their careers. He explained that he was able to deal with all of these problems to some considerable extent and finally obtained 302 acceptable responses.

Section 4.5 explained general methods and the specific data analysis techniques that he employed when considering the implications of the questionnaire responses. He noted that the data was analysed using the Statistical Package for Social Sciences (SPSS) at the Computer Centre in the College of Art at King Saud University, Saudi Arabia. He further explained that the principal statistical technique used to analyse the nominal and ordinal data from Parts One and Two of the questionnaire (respectively) was the correlation coefficient, more specifically, Spearman's Rho Measure of Association. In

this technique values of association between two variables range from -1 to 1. The closer the value is to 1 or -1 the stronger the association is between the variables. The value of absolute 1 or -1 indicates a perfect correlation coefficient between the variables, whereas the value of zero indicates no association between the two variables. Moreover the presence or absence of the minus sign indicates the direction of the association (i.e., a positive or negative correlation). The researcher explained that the variables for the purposes of this study were: 1) the overall job satisfaction level calculated from the responses to the final question in the questionnaire, which asked about overall job satisfaction; and 2) the various personal characteristics and job-related factors taken both collectively and individually. It was further noted that the level of significance used in testing the correlations was .05 per cent, usually regarded as an acceptable level in social science (Oskamp, 1977). The researcher then presented an example (using the personal characteristic age) to demonstrate the basic procedure he employed for each potential satisfaction factor.

In Section 4.6, the researcher explained how he conducted interviews with officials and workers in the Saudi offset companies to supplement the questionnaire data. He considered the importance of the Saudi cultural context as it relates to the interview process, and proceeded to explain briefly the procedure that employed when conducting the interviews.

#### **6.2.5 Chapter Five: Data Presentation and Analysis**

The purpose of this chapter was to present the data obtained from the responses to the research questionnaire and the subsequent interviews, along with the researcher's

analysis thereof. As the researcher explained, the empirical research project he conducted in the context of the three selected Saudi offset companies had three objectives. The first objective was to measure the overall level of job satisfaction in the three selected offset companies. The other two objectives involved assessing the relative significance, both collectively and individually, of the personal characteristics and work-related factors that the researcher identified as being potentially important in the course of his review of the existing literature on job satisfaction. More specifically, the second objective was to determine the extent to which the workers' personal characteristics contributed to the overall level of satisfaction. And the third objective was to determine the extent to which the selected job-related factors contributed to the overall level of satisfaction. The chapter was organised in such a way as to treat each of the three objectives in turn.

Section 5.2 was concerned with reporting, and considering the validity of, the overall level of worker satisfaction in the offset companies, as it corresponded to the responses to Question 80, the final question in the questionnaire. The responses to Question 80 showed a very high overall level of job satisfaction among the respondents. Of the 302 respondents, 151 employees, or exactly 50 percent, reported being satisfied with their job. A further 67 employees (22.2 percent) were very satisfied. Furthermore, of the remaining 84 employees, 11.6 per cent were neutral in their answer. Consequently those who responded that they were dissatisfied overall constituted only 10.9 percent of the total and those who were very dissatisfied constituted only a further 5.3 percent of the total. These results surprised the researcher, because his impression before conducting

the study was that there was considerable dissatisfaction overall among Saudi nationals working for the offset companies.

The researcher proceeded to consider the validity of the baseline data from Question 80 in terms of the findings of other scholars and in terms of his understanding of the possible implications of Saudi and Islamic culture. He observed that many scholars (including: Quinn and Staines, 1979; Furnham 1992; Organ and Lingl, 1995; Dekker, Barling and Kelloway, 1996; and Pool, 1997) have commented that, irrespective of other considerations, high percentages of workers tend to express overall satisfaction in surveys. This is perhaps particularly the case during recessed economic conditions, in which workers are less likely to risk their jobs by expressing complaints due to the lack of availability of alternative jobs. These economic conditions applied in the case of Saudi Arabia in 1998 when the survey data was collected. Furthermore, the researcher considers it possible that aspects of Saudi and Islamic culture might have inhibited the workers to some extent with respect to expressing overall dissatisfaction. The researcher proceeded to observe, however, that, to at least some extent, scholars are required to take a leap of faith and trust that their data is reasonably valid. However he also noted that they should attempt to strengthen their conclusions wherever possible by carefully considering the data presented with respect to the individual factors, and supplementary data such as that provided by follow-up interviews, etc. The researcher took such steps in the course of his analysis for this study, and found that the data for the individual sections of the questionnaire tended to support the overall finding from Question 80 to a very great extent.

In Section 5.3, the researcher proceeded to present and analyse the data on personal characteristics with a view to establishing their significance in relation to overall job satisfaction in the offset companies. The personal characteristics considered included: age; monthly income; years in current job; years in work overall; qualifications; job title; and marital status. The following table summarises the Spearman Correlation Coefficient significance findings for these characteristics.

**Table 6.1: Correlation Coefficients for Personal Characteristics**

<b>SPEARMAN CORRELATION COEFFICIENTS FOR PERSONAL CHARACTERISTICS</b>		
<b>Name of Factor</b>	<b>Significance</b>	<b>Null Hypothesis</b>
Age	.013	Accepted
Monthly Income	.181	Rejected
Exp. In Current Job	.117	Rejected
Exp. In All Jobs	.021	Accepted
Level of Qualification	.110	Rejected
Job Title	-.132**	Rejected
Marital status	-.031	Accepted

Generally speaking, these, along with a careful analysis of the aggregate data, led the researcher to conclude that the personal characteristics, taken as a whole, were not particularly significant (and much less significant than the job-related factors) in terms of the overall level of satisfaction in the offset companies. However, some of the characteristics, including monthly income, job title, experience in current job and level of qualification were found to be somewhat significant at the .05 level established as the basic parameter for the study.

In Section 5.4, the researcher presented and analysed the data on job-related factors with a view to establishing their significance in relation to overall job satisfaction in the offset companies. The job related factors included: work itself; pay; job benefits; recognition; supervision; promotion; working conditions; status and organisation

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\*\* Refer to the footnote in Section 5.3.5.

policies. The following table summarises the Spearman Correlation Coefficient significance findings for these factors.

Table 6.2: Correlation Coefficients for Job-Related Factors

SPEARMAN CORRELATION COEFFICIENTS FOR JOB-RELATED FACTORS		
Name of factor	Significance	Null Hypothesis
Work Itself	.619	Rejected
Pay	.356	Rejected
Job Benefits	.438	Rejected
Recognition	.512	Rejected
Supervision	.462	Rejected
Promotion	.451	Rejected
Working Conditions	.318	Rejected
Co-workers	.264	Rejected
Status	.467	Rejected
Organisation Policy	.430	Rejected

These findings, along with a careful analysis of the data from each section, and of the supplementary data from interviews, led the researcher to conclude that the job-related factors are highly significant in relation to the overall job satisfaction level, both collectively and individually. Work itself, recognition and status were found to have the highest significance, but every job-related factor was highly significant at the .05 level. The researcher also identified in this section several important problem areas that are generating considerable dissatisfaction in the offset companies. The most important problem area was the workers' general dissatisfaction with the offset companies' policies and practices with respect to training, transfers, dismissals, and (especially) promotions. Some other problems were uncovered with respect to: 1) job benefits, especially the pension system, which apparently has not been explained to the workers and which most are unhappy with; 2) pay, which nearly a third of workers felt was not adequate to fulfil their needs; and 3) recognition, with many lower ranking employees expressing the feeling that their supervisors and managers do not do enough to make them feel as if their work is appreciated.

## **6.3 Final Discussion**

### **6.3.1 The Key Findings Relating to the Primary Purpose of the Study**

As the researcher noted in the introduction to the study, and again in this chapter, up to now, the issue of job satisfaction in the Saudi offset companies has not really received adequate consideration, particularly given the high significance of the companies with respect to the long-term economic well-being of the Kingdom. Previously, little had been done in terms of: 1) measuring the extent of dissatisfaction in the offset companies; 2) trying to understand its underlying causes 3) considering its potential significance; or 4) taking appropriate steps to improve worker satisfaction levels. The researcher explained that the primary purpose of this study was to address these issues: 1) through a review of the existing literature on job satisfaction, intended to help the researcher and others to understand the nature of job satisfaction, the potential causal factors of different levels of satisfaction, and the consequences of different levels of satisfaction; and 2) by presenting the results of an empirical research project the researcher conducted in three of the more developed offset companies, to measure the existing levels of satisfaction and to assess the significance of the different causal factors in relation to these levels. The development of the research and the conclusions with respect to the study's primary aim were treated in some detail in the previous section. To reiterate the basic findings:

- 1) The level of overall worker satisfaction in the three offset companies surveyed was found to be quite high, with half of all the respondents indicating that they were satisfied overall, and a further 22.2 percent reporting that they were very satisfied.

- 2) All of the job-related factors included in the research questionnaire were found to be highly significant in relation to the high overall level of satisfaction, with work itself, recognition and status ranking as the most important factors.
- 3) Some of the personal characteristics, monthly income, job title and qualification were also found to be significant, but to a lesser extent than any of the job-related factors.
- 4) In spite of the high overall level of satisfaction, the questionnaire data and the interviews revealed a number of potentially significant problem areas, which the researcher feels the offset companies' administrators should take measures to address. Probably the most important of these was the high level of dissatisfaction with the offset companies' policies governing training, dismissals, transfers and (especially) promotions. Other problems included: a general ignorance about, and dissatisfaction with, the pension scheme; a feeling among roughly a third of workers that their pay is not sufficient to fulfil their needs; and considerable dissatisfaction among lower ranking workers who feel that their supervisors and managers do not express adequate recognition or appreciation of the work they do.

### **6.3.2 Other Issues Raised in the Context of the Study**

The researcher will now consider some of the secondary issues he raised in the introductory chapter that he has not previously treated in detail in the course of the study: 1) the applicability of western theories and models of job satisfaction to work settings in the developing world generally, and Saudi Arabia particularly; 2) the value of a broad-based multi-factor approach with respect to considering and measuring job



satisfaction; and 3) the possibility and value of further job-satisfaction research in the context of the Saudi economic offset companies.

With respect to the first issue, the researcher would strongly argue that this study provides evidence to support the conclusion that Western theories and models of job satisfaction can be very usefully applied in work settings in the developing world generally and Saudi Arabia specifically. Although some measures did have to be taken to adapt the actual techniques for measuring satisfaction (i.e., the questionnaire and interviews) to the specific cultural context of the work setting, the researcher found that many of the general motivational observations of the Western theories, and many of the potential satisfaction factors identified by empirical researchers working in developed Western work settings, certainly reflected realities in the context of the Saudi offset companies. The researcher would restate, at this point, his hope that this study will help to encourage further studies of job satisfaction in the developing world, and Saudi Arabia particularly.

The researcher would also argue that the study demonstrates the value of a broad-based multi-factor approach to understanding and measuring job satisfaction. As the researcher noted previously, many researchers have tended to focus their attention on only a few of the potentially significant factors, and have not distinguished sufficiently between, or incorporated, the different kinds of satisfaction factors. This study looked at a broad range of factors, and included all three kinds of potential satisfaction factors: 1) personal factors (or personal characteristics); 2) intrinsic factors, having to do with the

nature of the work itself; and 3) extrinsic factors, having to do with the work context or work environment.

The researcher feels that incorporating many potential factors will help scholars looking at job satisfaction to construct a more complete picture of the different forces that shape workers' overall satisfaction levels. Questionnaires that incorporate fewer potential factors run the risk of missing factors that workers might have expressed strong feelings about if they had been asked.

Furthermore, the researcher would assert the value of incorporating all three kinds of factors into job satisfaction studies. This allows for a much more comprehensive understanding of the interrelationship between the individual, his work and his work environment. The researcher found that intrinsic factors were particularly significant in relation to the offset company employees' overall satisfaction levels, but that virtually all of the extrinsic factors investigated were also highly significant. Even though the personal characteristics were found to be less significant on the whole, they helped the researcher significantly with his data analysis. For example, when looking at recognition, the researcher was able distinguish between the feelings of the lower and higher ranking workers by performing a crosstabulation with job title, and he found that lower ranking workers were less satisfied with this factor. When he conducted the subsequent interviews he was able to investigate this, and found that, indeed, the lower ranking workers felt that supervisors and managers were not giving them sufficient recognition for their work, while the managers and supervisors themselves were satisfied with the recognition that they received, and consequently might not have

considered the possibility that lower ranking workers felt that there was a problem in this area. The researcher felt that having data on all three kinds of factors was of great benefit to his study, and would therefore recommend the approach to other researchers.

Finally, as the researcher noted in the introduction, the scope of his enquiry into job satisfaction levels in the Saudi offset companies was necessarily limited by the fact that he was only able to include the Saudi nationals working for the companies. Obviously, as the researcher noted, the Saudi employees are the ones on whom the long-term future of the companies will ultimately depend. This does not mean, however, that the contributions of the expatriate workers are unimportant or unappreciated. In fact, the researcher recognises that much depends on the contributions of the expatriate consultants, experts and highly skilled employees, particularly at this crucial early stage in the offset companies' development. In light of this consideration, it can be seen that there is room for the further development of research on job satisfaction in the offset companies. However, the researcher is confident that this study has laid a firm foundation for any future studies.

## **Appendix**

This appendix includes two copies of the research questionnaire. The first copy is the original version of the questionnaire in English. The second copy is the Arabic translation that was actually distributed in the three selected offset companies during the course of the empirical research project.

## QUESTIONNAIRE

# AN ANALYTICAL STUDY OF JOB SATISFACTION AMONG SAUDI NATIONALS IN THE SAUDI ECONOMIC OFFSET PROGRAM COMPANIES

CASE#

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## PART ONE BACKGROUND INFORMATION

This part consists of some background information questions that may help to analyze the data for the study. Please place (✓) in the space following the statement that most nearly describes your own background.

### 1. What is your age?

1. 18 to 25 years.....☐

2. 26 to 35 ..... ☐

3. 36 to 45 ..... ☐

4. 46 to 55 ..... ☐

5. 56 to 65 . ..... ☐

..... ☐

### 2. What is your monthly income?

1. less than 3000 SR .....☐

2. 3001 to 6000 ..... ☐

3. 6001 to 9000 ..... ☐

4. 9001 to 12000 ..... ☐

5. 12001 to 15000 ..... ☐

6. 15000 SR or more ..... ☐

### 3. How many years have you worked for your current employer?

1. 1 to 5 years .....☐

2. 6 to 10 years .....☐

3. 11 to 15 years .....☐

4. More than 15 years.....☐

### 4. How many years have you been working [in all kind of jobs]?

1. 1 to 5 years .....☐

2. 6 to 10 years .....☐

3. 11 to 15 years .....☐

4. More than 15 years .....☐

### 5. What level of education have you completed?

1. Elementary school .....☐

2. Intermediate school .....☐

3. Secondary school .....☐

4. Diploma .....☐

5. University degree .....☐

6. High degree .....☐

### 6. What kind of job do you do?

1. Supervisor .....☐

2. Manager .....☐

3. Engineer .....☐

4. Technician .....☐

5. Clerk .....☐

6. Security .....☐

### 7. Marital status:

1. Married ☐

2. Single ☐

## PART TWO

### JOB SATISFACTION QUESTIONS

#### Instructions:

This part consists of (73) questions or statements about some things that may affect the way you feel about your job. Not all the items may apply to your job but please try to answer all of the questions.

1. Please read each statement carefully.
2. Then, think of a time when you felt exceptionally good [happy or satisfied] or exceptionally bad [unhappy or dissatisfied] about your job.
3. Then place (✓) in the box that most nearly tells how you feel about the statement.
4. "Dissatisfied" or "Very dissatisfied" means that the statement was important for you in feeling bad about the job experience you are describing.
5. "Satisfied" or "Very satisfied" means that the statement was important for you in feeling good about the job experience you are describing.
6. "Don't know" means that you are undecided about how important the statement is in feeling good or bad about the job experience you are describing. "Don't know" may also mean that you are neither satisfied nor dissatisfied.

#### Work Itself.

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
8	The opportunity for training and experience on the job that will help my growth .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	The opportunity to learn new things...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Opportunities to do a whole job...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	The freedom to use my own judgment..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	The opportunity to be responsible for planning my work...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	The opportunity to try my own methods of doing the job..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	The opportunities to do my best at all times..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	The opportunities to be responsible for the work of the others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
16	The opportunities to develop my skills and abilities...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Being able to do something I think is worthwhile..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	The opportunities to try out some of my ideas..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	The opportunities to develop new and better ways to do my job..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	The opportunities to make decision on my own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	The creativity of my job...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	The responsibilities of my job..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	The job I am holding..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	The difficulties of my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	All in all, to what extent are you satisfied with the work you perform	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Pay.**

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
26	The amount of pay for the work I do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	My pay and the amount of work I do..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	Fulfillment of personal needs..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	All in all, to what extent are you satisfied with your pay.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



### Job Benefits

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
30	The pension scheme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	The holiday system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	Medical services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	Catering services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	The way my job provides for a secure future..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	The way my job provides for steady employment..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36	Entertainment for me and my family..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37	the amount of time my job allows me to be with my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	All in all, to what extent are you satisfied with the job benefits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Recognition

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
39	The feelings of accomplishment I get from my job...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40	Recognition from my co- workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41	The opportunities I have to do something that makes me feel good about my self as a person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42	The way I get full credit for the work I do .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43	The way I am noticed when I do a good job..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44	The praise I get for doing a good job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45	All in all, to what extent are you satisfied with the recognition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Supervision

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
46	The way my supervisor and I understand each other.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47	The way my boss delegates work to others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48	The way my boss handles his employees..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49	The competence of my supervisor in making decision..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50	The personal relationship between my boss and his employees..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51	The way my boss provides help on hard problems..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52	The way my boss trains his employee.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53	All in all, to what extent are you satisfied with supervision.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Promotion.

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
54	My feeling for advancement..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55	The opportunities for advancement on my job..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56	The opportunities for getting ahead of my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57	The way promotions are given out on my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58	All in all, to what extent are you satisfied with promotion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Working Condition.

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
59	The working conditions ( heating, lightning, ventilation.. etc.) on my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60	The pleasantness of the working condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61	The working hours.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62	The equipment used in your work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63	All in all, to what extent are you satisfied with working condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Co-workers

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
64	Relationship with my co-workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65	Cooperation in the work place with my co-workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66	All in all, to what extent are you satisfied with co-workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Status

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
67	The social status I got from my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68	The reputation my family gets from my job..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69	Opportunities to be around important people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70	The opportunity to be important in the eyes of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71	All in all, to what extent are you satisfied with status.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Organisational Policies.

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
72	Organisation policy and the way in which they are administrated..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
73	The way employees are informed about Organisation policies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
74	The way I am informed about my job performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
75	The way the Organisation treats its employees..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
76	The policies and practices towards employees..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
77	The way organizational policies are put into practice..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
78	The way layoffs and transfers are made in my job..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
79	All in all, to what extent are you satisfied with the organizational policy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Final Question.

	Statements	[1] Very dissatisfied	[2] dissatisfied	[3] don't know	[4] satisfied	[5] very satisfied
80	All in all, to what extent are you satisfied with your job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## استبيان

### دراسة تحليلية للرضا الوظيفي لدى الموظفين السعوديين في شركات برنامج التوازن الاقتصادي السعودي

رقم #

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## الجزء الأول

هذا الجزء يحتوي على بعض الأسئلة العامة التي سوف تساعد في تحليل الدراسة أرجو أن تتكرم بأن تضع علامة (✓) في الخانة المناسبة لكل جملة أو سؤال ينطبق أو يتناسب مع وضعك.

(١) كم عمرك؟	(٢) الدخل الشهري.
١ <input type="checkbox"/> ١٨ - ٢٥ سنة	١ <input type="checkbox"/> أقل من ٣٠٠٠ ريال
٢ <input type="checkbox"/> ٢٦ - ٣٥ سنة	٢ <input type="checkbox"/> ٣٠٠١ - ٦٠٠٠
٣ <input type="checkbox"/> ٣٦ - ٤٥ سنة	٣ <input type="checkbox"/> ٦٠٠١ - ٩٠٠٠
٤ <input type="checkbox"/> ٤٦ - ٥٥ سنة	٤ <input type="checkbox"/> ٩٠٠١ - ١٢٠٠٠
٥ <input type="checkbox"/> ٥٦ - ٦٥ سنة	٥ <input type="checkbox"/> ١٢٠٠١ - ١٥٠٠٠
٦ <input type="checkbox"/> أكثر من ١٥٠٠٠ ريال	٦ <input type="checkbox"/> أكثر من ١٥٠٠٠ ريال
(٣) كم المدة التي أمضيتها في عملك الحالي؟	(٤) كم المدة التي أمضيتها في مختلف الوظائف التي عملت بها
١ <input type="checkbox"/> ٥-١ سنوات	١ <input type="checkbox"/> ٥-١ سنوات
٢ <input type="checkbox"/> ٦-١٠ سنوات	٢ <input type="checkbox"/> ٦-١٠ سنوات
٣ <input type="checkbox"/> ١١-١٥ سنة	٣ <input type="checkbox"/> ١١-١٥ سنة
٤ <input type="checkbox"/> أكثر من ١٥ سنة	٤ <input type="checkbox"/> أكثر من ١٥ سنة
(٥) ما هي المرحلة التعليمية التي أكملتها؟	(٦) ما هو العمل الذي تقوم به؟
١ <input type="checkbox"/> المرحلة الابتدائية أو ما يعادلها	١ <input type="checkbox"/> مشرف
٢ <input type="checkbox"/> المرحلة المتوسطة أو ما يعادلها	٢ <input type="checkbox"/> مدير
٣ <input type="checkbox"/> المرحلة الثانوية أو ما يعادلها	٣ <input type="checkbox"/> مهندس
٤ <input type="checkbox"/> دبلوم	٤ <input type="checkbox"/> فني
٥ <input type="checkbox"/> المرحلة الجامعية	٥ <input type="checkbox"/> كاتب
٦ <input type="checkbox"/> درجة عالية (ماجستير أو دكتوراه)	٦ <input type="checkbox"/> أمن
<div style="display: flex; justify-content: space-between;"> <span>(٧) الحالة الاجتماعية:</span> <span>١. متزوج <input type="checkbox"/> ٢. أعزب <input type="checkbox"/></span> </div>	

تعليمات:

هذا الجزء من الاستبيان يحتوي على (٧٣) جملة أو سؤال عن أشياء قد تؤثر على شعورك نحو عملك . قد لا تنطبق عليك كل هذه الاسئلة ولكن الرجاء محاولة الإجابة عليها جميعاً وإتباع التالي:

١. من فضلك إقرأ كل سؤال أو جملة بعناية تامة.
٢. فكر في وقت شعرت فيه أثناء عملك بالسعادة أو (الرضا التام) أو فكر في وقت شعرت فيه أثناء عملك بعدم السعادة أو (عدم الرضا) عن عملك سواء كان عملك الحالي أو أي عمل مارسته في الماضي.
٣. ضع علامة (✓) في أحد الخانات التي تتلائم مع شعورك نحو السؤال أو الجملة.
٤. ( راض ) أو ( راض جداً ) تعني أن الجملة كانت مهمة بالنسبة لك أثناء شعورك بالسعادة والرضا حول تجربة العمل التي تصفها.
٥. ( غير راض ) أو ( غير راض إطلاقاً ) تعني أن الجملة كانت مهمة بالنسبة لك أثناء شعورك بعدم السعادة وعدم الرضا حول تجربة العمل التي تصفها.
٦. ( لا أدري ) تعني إنك غير متأكد من أنك راض أو غير راض من شعورك نحو عملك وربما تعني أيضاً أن ليس لها علاقة بتجربة العمل التي تصفها.

الفرص المتاحة في العمل

(٥)	(٤)	(٣)	(٢)	(١)	الجملة أو السؤال	
راض جداً	راض	لا أدري	غير راض	غير راض إطلاقاً		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٨ الفرص المتاحة لي في مجال التدريب واكتساب الخبرات في العمل والتي تساعد على نموي الوظيفي	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٩ الفرص المتاحة لي لتعلم واكتساب أشياء جديدة في مجال عملي	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	١٠ الفرص المتاحة لي للقيام بمهمة كاملة	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	١١ الحرية المتاحة لي لاتخاذ حكمي ورأيي الخاص	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	١٢ الفرصة المتاحة لي لكي أكون مسؤولاً عن تخطيط عملي	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	١٣ الفرصة المتاحة لي لتجريب طريقتي الخاصة لأداء العمل	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	١٤ الفرصة المتاحة لي لأداء أفضل ما أستطيع في كل الأوقات	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	١٥ الفرصة المتاحة لي لكي أكون مسؤولاً عن عمل آخرين.	

الجملة أو السؤال	(١) غير راض إطلاقاً	(٢) غير راض	(٣) لا أدري	(٤) راض	(٥) راض جداً
١٦ الفرص المتاحة لي لتنمية مهاراتي وقدراتي الخاصة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
١٧ الإمكانيات المتاحة لي لإنجاز أشياء هامة وتستحق التقدير	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
١٨ الفرص المتاحة لي في عملي لكي أطبق أفكارتي وأرائي الخاصة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
١٩ الفرص المتاحة لي لتطوير وسائل جديدة وأفضل لاداء عملي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٢٠ الفرصة المتاحة لي لاتخاذ القرارات في عملي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٢١ الإبداع في عملي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٢٢ مسؤوليات عملي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٢٣ طبيعة عملي ونوعيته	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٢٤ الصعوبات التي تواجهني في عملي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٢٥ بشكل عام، هل أنت راض عن عملك الذي تؤديه	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### الراتب

الجملة أو السؤال	(١) غير راض إطلاقاً	(٢) غير راض	(٣) لا أدري	(٤) راض	(٥) راض جداً
٢٦ الراتب الذي احصل عليه	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٢٧ الراتب الذي أتقاضاه وحجم العمل الذي أؤديه	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٢٨ تلبية الحاجات الشخصية	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٢٩ بشكل عام، هل أنت راض عن الراتب	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## فوائد ومزايا الوظيفة

الجملة أو السؤال	(١) غير راض إطلاقاً	(٢) غير راض	(٣) لا أدري	(٤) راض	(٥) راض جداً
٣٠ نظام التقاعد	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٣١ نظام الإجازات	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٣٢ الخدمات الصحية	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٣٣ خدمات التموين	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٣٤ دور وظيفتي في تأمين مستقبلي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٣٥ الفرصة التي تتيحها وظيفتي للاستقرار الوظيفي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٣٦ الفرص التي يتيحها عملي في سبيل توفير التسلية والترفيه لي ولعائلي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٣٧ الوقت الذي تتيحه لي وظيفتي للتواجد مع أسرتي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٣٨ بشكل عام، هل أنت راض عن الفوائد والمزايا.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## التقدير والحوافز

الجملة أو السؤال	(١) غير راض إطلاقاً	(٢) غير راض	(٣) لا أدري	(٤) راض	(٥) راض جداً
٣٩ الشعور بالإنجازات التي احصل عليها من عملي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٤٠ التقدير والاعتراف من قبل زملائي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٤١ الفرص المتاحة للقيام بعمل يجعلني أشعر بالسعادة إزاء نفسي كشخص	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٤٢ الطريقة التي احصل بها على الجزاء الكامل نظير العمل الذي أؤديه	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٤٣ الطريقة التي يخبروني بها عندما أقوم بعمل جيد	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٤٤ الجائزة أو الثناء الذي أتلقيه مقابل أداء عمل جيد	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٤٥ بشكل عام هل أنت راض عن التقدير.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## رئيسك في العمل

الجملة أو السؤال	(١) غير راض إطلاقاً	(٢) غير راض	(٣) لا أدري	(٤) راض	(٥) راض جداً
٤٦ الطريقة التي بها - أنا ورئيسي نفهم بعضنا البعض	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٤٧ الطريقة التي يفوض بها الرئيس سلطته لمؤسسه	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٤٨ الطريقة التي يتبعها رئيسي لحل مشاكل الموظفين	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٤٩ جدارة رئيسي في اتخاذ القرارات	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٥٠ العلاقة الشخصية بين رئيسي وموظفيه	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٥١ الطريقة التي يقدم بها رئيسي المساعدة في المشاكل الصعبة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٥٢ الطريقة التي يتبعها رئيسي لتدريب الموظفين	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٥٣ بشكل عام، هل أنت راض عن رئيسك	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## الترقية والتقدم في العمل

الجملة أو السؤال	(١) غير راض إطلاقاً	(٢) غير راض	(٣) لا أدري	(٤) راض	(٥) راض جداً
٥٤ شعوري تجاه التقدم والترقي الوظيفي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٥٥ الفرص المتاحة لي للترقي في عملي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٥٦ الفرص المتاحة لي للتقدم في عملي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٥٧ الترقيات المتاحة لي في عملي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٥٨ بشكل عام، هل أنت راض عن الترقية في عملك.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### الحالة العامة للعمل

الجملة أو السؤال	(١) غير راض إطلاقاً	(٢) غير راض	(٣) لا أدري	(٤) راض	(٥) راض جداً
٥٩ ظروف العمل وبيئة (الإضاءة، التهوية، التدفئة)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٦٠ جودة أجواء العمل	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٦١ ساعات العمل	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٦٢ الأجهزة المستعملة في العمل	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٦٣ بشكل عام، هل أنت راض عن الحالة العامة للعمل	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### العلاقة مع زملائك

الجملة أو السؤال	(١) غير راض إطلاقاً	(٢) غير راض	(٣) لا أدري	(٤) راض	(٥) راض جداً
٦٤ العلاقات الشخصية مع زملائك	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٦٥ التعاون في مجال العمل مع زملائك	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٦٦ بشكل عام، هل أنت راض عن علاقتك مع زملائك في العمل.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### المكانة الاجتماعية

الجملة أو السؤال	(١) غير راض إطلاقاً	(٢) غير راض	(٣) لا أدري	(٤) راض	(٥) راض جداً
٦٧ المكانة الاجتماعية التي أنالها من وظيفتي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٦٨ السمعة أو الشهرة التي تنالها عائلتي من وظيفتي	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٦٩ الفرص المتاحة لي في عملي لكي أكون حول شخصيات مهمة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٧٠ الفرصة المتاحة لي لكي أبدو مهماً في أعين الآخرين	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
٧١ بشكل عام، هل أنت راض عن المكانة الاجتماعية.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## الأنظمة الإدارية

(٥)	(٤)	(٣)	(٢)	(١)	الجملة أو السؤال	
راض جداً	راض	لا أدري	غير راض	غير راض إطلاقاً		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٧٢ أنظمة وإجراءات الإدارة والطرق المتبعة في إدارتها	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٧٣ الطريقة التي تخبر بها الإدارة الموظفين عن الإجراءات والتعليمات	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٧٤ الطريقة التي بها أعرف عن أدائي لعملتي	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٧٥ الطريقة التي تتعامل بها الإدارة التي اعمل بها مع موظفيها	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٧٦ أنظمة الإدارة وتطبيقاتها على الموظفين	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٧٧ الطريقة التي تتخذها الإدارة لتطبيق أنظمتها وإجراءاتها	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٧٨ الطريقة التي يتم بها الإيقاف أو النقل في وظيفتي	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٧٩ بشكل عام، هل أنت راض عن الأنظمة الإدارية.	

## السؤال الأخير

(٥)	(٤)	(٣)	(٢)	(١)	الجملة أو السؤال	
راض جداً	راض	لا أدري	غير راض	غير راض إطلاقاً		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	٨٠ بشكل عام، هل أنت راض عن وظيفتك	

## References

### Books:

- Adams, J S (1965) *Inequity in Social Exchange*. In *Management And Motivation*. Edited by Vroom, H V and Deci, LD (1992) Second Edition. Clays Ltd. London, UK.
- Argyle, Michael (1989) *The Social Psychology of Work*. Second Edition. Penguin Books Ltd, England, London, UK.
- Armstrong, Michael (1988) *A Handbook of Personnel Management Practice*. Kogan Publishers, London, UK.
- Ashour, Ahmad (1983) *Personnel Management*. Dar Al Nhdh Al Arabiah, Beirut, Lebanon.
- Atkinson, J W (1964) *An Introduction to Motivation*. Van Nostrand Publishers, Princeton, N J, USA
- Batten J (1966) *Beyond Management by Objectives*. American Management Association Inc. USA
- Berry, Lilly and Houston, John (1993) *Psychology At Work: An Introduction to Industrial and Organizational Psychology*. Wm. C. Brown Communications, Inc., USA.
- Bland, Martin (1995) *An Introduction to Medical Statistics*. Oxford University Press, UK.
- Blum, Milton L and Naylor, James C (1968) *Industrial Psychology; Theoretical and Social Foundations*. Harper and Row Publishers, New York, USA.
- Bruce, Willa M and Blackburn, J Walton (1992) *Balancing Job Satisfaction and Performance - A Guide For Human Resource Professionals*. Quorum Books, Greened Publishing Group Inc., London, UK.
- Bryman, Alan. and Cramer, Duncan (1994) *Quantitative Data Analysis for Social Scientists*. Routledge, London, UK and New York, USA.
- Buck, Ross (1988) *Human Motivation and Emotion*. Second Edition. John Wiley & Sons, New York, USA.
- Bussing, H (1997) *Motivation and Satisfaction*. In *The IEBM Handbook of Organisational Behaviour*. Edited by Sorge, A. and Warner, M. International Thomson Business Press, London, UK.
- Bynner, John. and Stribely, Keith (1986) *SocialRresearch: Principles and Procedures*. Longman, New York, USA and Open University Press, UK.

Campbell, J P and Pritchard, R D (1976) *Motivation Theory and Organisational Psychology*. Rand McNally, Chicago, USA.

Carrell, L Michael R and Kuzmits, Frank E (1986) *Personnel and Human Resource Management*. Second Edition. Merrill Publishing Company, Columbus, OH, USA.

Clark, Louise, J (1991) *The Essentials of Business Statistics*. Research and Education. Association, Piscataway, NJ, USA.

Cook John D Hepworth, Sue J Wall, Toby D and Warr, Peter B (1981) *The Experience Of Work; A Compendium and Review of 249 Measures and their Use*, Academic Press, London, UK.

Coolican, Hugh (1994) *Research Methods Statistics in Psychology*. Second Edition. Holder Stoughton, London, UK.

Cuming, Maurice W (1993) *The Theory and Practice of Personnel Management*. Seventh Edition. Butterworth-Heinemann Ltd, London and Oxford, UK.

Dubrin, Andrew J (1972) *The Practice of Managerial Psychology*. Pergamon Press Inc, Toronto, Canada.

Ford, Martin E (1992) *Motivating Humans; Goals, Emotions and Personal Agency Beliefs*. Sage Publications Inc., CA, USA

Franken, Robert E (1982) *Human Motivation*. Wadsworth Publishing Company Belmont, CA, USA.

Fraser, T M (1983) *Human Stress, Work and Job Satisfaction: A Critical Approach*. International Labour Office. Geneva, Switzerland.

Furnham, Adrian (1992) *Personality At Work: The Role of Individual Differences in the Work Place*. Routledge, London, UK.

Garland, G C (1980) *Leadership and Morale Building: A Back-to-Basics Approach*. Kappa Delta Record, USA.

Gibbons D. Jean (1993) *Nonparametric Measures Of Association* In the series: *Quantitative Applications In The Social Sciences*. Sage Publications Inc., CA, USA.

Gilmer and Von B Haller (1966) *Industrial Psychology*. Second Edition. McGraw-Hill Book Company, New York, USA.

Gilmer, Von B Haller and Deci, Edward L. (1977) *Industrial And Organisational Psychology*. Fourth Edition. McGraw-Hill Book Company, New York, USA.

Gordon, J (1996) *Organisational Behaviour*. Prentice Hall Inc., Upper Saddle River, NJ, USA.

Gould, J and Kolb W (1964) *A Dictionary of the Social Sciences*. Tavistock Publications, London, UK..

Gruneberg, Michael M (1979) *Understanding Job Satisfaction*. Macmillan Press Ltd., London, UK.

Hackett, Penny (1992) *Success In Management: Personnel*. Third Edition. Clays Ltd, St. Ives Plc., London, UK.

Hackman, Richard (1977) *Work Design*. In *Motivation And Work Behaviour*. Edited by Steers, Richard M and Porter, Lyman, W (1983) McGraw-Hill Book Company, New York, USA.

Halloran, Jack (1986) *Personal and Human Resource Management*. Prentice-Hall Inc., Englewood Cliffs, NJ, USA.

Hellriegel D and Slocum J (1976) *Organisational Behaviour: A Contingency View*. West Publishing Co., UK.

Herzberg, F Mausner, and Snyderman, B (1993) *The Motivation to Work*. Transaction Publishers, NJ, USA.

Hodgetts, R M and Luthans, F (1991) *International Management*. McGraw-Hill Book Company, New York, USA.

Huczynski, Andrzej and Fitzpatrick, Michael J (1989) *Managing Employee Absence for Competitive Edge*. Pitman, A Division of Longman Group, London, UK.

Huczynski, Andrzej and Buchanan, D (1991) *Organisational Behaviour: An Introductory Text*. Second Edition. Prentice-Hall International, London, UK.

Hunt J (1986) *Managing People at Work: A Manager's Guide to Behavior in Organizations*. Second Edition. McGraw-Hill Book Company, New York, USA.

Kast F and Rosenzweig J (1979) *Organisation and Management: A System and Contingency Approach*. Third Edition. McGraw- Hill Book Company, New York, USA.

Katzell, Raymond A, Thompson, Donna E And Guzzo, Richard A (1992) *How Job Satisfaction and Job Performance Are and Are Not Linked*. In *Job Satisfaction, How People Feel About Their Jobs and How It Affects Their Performance*. Edited by Cranny C J, Cain Smith, Patricia and Stone, Eugene F (1992) Lexington Books, Macmillan, Inc., New York, USA.

King, Nathan (1970) *Clarification and Evaluation of the Two-Factor Theory of Job Satisfaction*. In *Job Satisfaction*, Edited by Gruneberg Michael M (1976) Macmillan Press Ltd., London, UK.

Kirkwood, Betty. R (1988) *Essentials of Medical Statistics*. Blackwell Scientific Publications, Oxford, UK.



Korman, Abraham K (1971) *Industrial and Organisational Psychology*. Prentice-Hall Inc., Englewood Cliffs, NJ, USA.

Kornhauser, Arthur (1965) *Job Satisfaction In Relation to the Mental Health of the Industrial Worker*. In *A Detroit Study in Management and Motivation*. Edited by Vroom, V H and Deci L E (1985) Penguin Books, Ltd., London, UK.

Kossen, Stan (1978) *The Human Side of Organizations*. Second Edition. Canfield Press, San Francisco, USA.

Lawler, Edward E and Porter, Lynam W (1967) *The Effect Of Performance On Job Satisfaction*. In *Job Satisfaction*. Edited by Michael M Gruneberg (1976) Macmillan Press Ltd., London, UK.

Lawler, Edward E (1973) *Motivation in Work Organizations*. Wadsworth Publishing Company, Belmont, CA, USA.

Livy, Bryan (1988) *Corporate Personnel Management*, Pitman, A Division of Longman Group, London, UK.

Locke, E A (1976), *The Nature and Causes of Job Satisfaction*. In *A Handbook Of Industrial and Organizational Psychology*. Edited by Dunette, M.D (1976) Rand McNally Chicago, USA.

Locke, E A (1984) *Job Satisfaction In Social Psychology and Organisational Behaviour* (1984) Edited by Gruneberg, Michael and Wall, Toby. John Wiley & Sons, Chichester, UK.

Luthans, Fred (1989) *Organizational Behavior*. Fifth Edition. McGraw-Hill Book Company, New York, USA.

Maier, Norman R F (1973) *Psychology in Industrial Organizations*. Houghton Mifflin Company, Boston, USA.

Martin, Stephen (1996) *The Economics of Offsets, Defence Procurement and Countertrade*. Harwood Academic Publishers, UK.

Maslow, A H (1970) *Motivation and Personality*. Second Edition. Harper and Row Publishers, New York, USA.

McCormick, E J and Ilgen D R (1985) *Industrial Psychology*. Eighth Edition. Prentice-Hall Publishers, Englewood Cliffs, NJ, USA.

McKenna, E (1994) *Business Psychology and Organisational Behaviour*. Lawrence E. Assoc. Ltd., East Sussex, UK.

McKenna, Eugene F (1987) *Psychology in Business Theory and Applications*. Lawrence Erlbaum Association, London, UK.



- Miner, John B (1992) *Industrial Organizational Psychology*. McGraw-Hill Book Company, New York., USA.
- Mobley, William H (1982) *Employee Turnover: Causes, Consequence and Control*. Adisson-Wesley Publishing Company, London, UK.
- Muchinsky, Paul M (1997) *Psychology Applied to Work. An Introduction to Industrial and Organizational Psychology*. Brooks Cole Publishing Company, CA, USA.
- Mullins, Laurie J (1990) *Management and Organisational Behaviour*. Second Edition. Pitman: A Division of Longman Group, London, UK.
- Mullins, Laurie J (1993) *Management and Organisational Behaviour*. Third Edition. Pitman: A Division of Longman Group, London, UK.
- Mullins, Laurie J (1996) *Management And Organisational Behaviour*. Fourth Edition. Pitman: A Division of Longman Group, London, UK.
- Namer, Sauod M (1990) *Administrative Behaviour*. King Saud University Press, Riyadh, Saudi Arabia.
- Nash, Michael (1985) *Making People Productive*. Jossey-Bass Publishers, San Francisco, CA, USA.
- Oskamp, Stuart (1977) *Attitudes and Opinions*. Prentice-Hall Inc., Englewood Cliffs, NJ, USA.
- Paul, W J, And Robertson K B (1970) *Job Enrichment and Employee Motivation*. Gower Press Limited, London, UK.
- Quinn, R P and Staines, G L (1979) *The 1977 Quality of Employment Survey*. Institute for Social Research, University of Michigan, Ann Arbor, MI, USA.
- Reiner, Robert (1978) *The Blue-Coated Worker; A Sociological Study Of Police Unionism*. Cambridge University Press, Cambridge, UK.
- Ribeaux, P And Poppleton, S E (1981) *Psychology And Work: An Introduction*. The Macmillan Press Ltd., London, UK.
- Riggio, Ronald, E (1990) *Introduction to Industrial Organisational Psychology*. Scott, Foresman, A Division Of Scott, Foresman and Company, London, UK.
- Robinson, Kenneth R (1984) *A Practical Approach to Employee Motivation*. Heffers Printers Limited, Cambridge, UK.
- Schultz, Duane P (1978) *Psychology and Industry Today: An Introduction to Industrial and Organizational Psychology*. Macmillan Publishing, New York, USA.

- Sirkin, R Mark (1995) *Statistic for the Social Sciences*. Sage Publications Inc., CA, USA.
- Steers, Richard M and Porter, Lyman W (1991) *Motivation and Work Behaviour*. Fifth Edition. McGraw- Hill Book Company, New York, USA.
- Thierry, H and Koopman-Iwema, Agnes (1984) *Motivation and Satisfaction*. In *A Handbook of Work And Organisational Psychology*. Edited by Drenth, P J D, Thierry, H, Willems, PJ and Wolff, C J de (1984) John Wiley & Sons Ltd., Chichester, UK.
- Tiffin, Joseph and McCormick, Ernest (1965) *Industrial Psychology*. Fifth Edition. Prentice-Hall Inc., Englewood Cliffs, NJ, USA.
- Torrington, Derek and Hall, Laura (1991) *Personnel Management; A New Approach*. Second Edition. The Dryden Press, A Division of Holt, Rineheart and Winston, and Saunders College Publishing, Chicago, USA.
- Vecchio, Robert P (1991) *Organizational Behavior*. Second Edition, The Dryden Press, A Division of Holt, Rinehart and Winston Inc., USA.
- Vecchio, R P (1995) *Organizational Behavior*. Third Edition. Harcourt Brace and Company, Orlando, FL, USA.
- Viteles, M S (1953) *Motivation and Morale in Industry*. W W Norton Publishers, New York, USA.
- Vroom V H (1964) *Work and Motivation*. Second Edition. John Wiley & Sons Inc., New York, USA.
- Vroom V H, (1969) *Industrial Social Psychology*. In *Management and Motivation*, Edited by Vroom, V H And Deci, L E (1985) Penguin Books Ltd., London, UK.
- Wahba, Mohmoud A and Bridwell, Lawrence G (1973) *Maslow Reconsidered: A Review Of Research On The Need Hierarchy Theory*. In *Motivation And Work Behavior*. Edited by Steers, Richard M and Porter, Lynam W (1987). McGraw-Hill Book Company, New York, USA.
- Youngman M B (1979). *Essential Empirical Rediguide 28*. Rediguides in Educational Research, University of Nottingham, UK.
- Youngman, M B (1982). *Designing and Analyzing Questionnaires: A Rediguide*. Rediguides in Educational Research, University of Nottingham, UK.
- Youngman, M B and Eggleston J F (1982) *Constructing Tests and Scales*. TRC, Oxford, UK.

## Journal Articles:

- Abouserie, Reda (1996) *Stress, Coping Strategies and Job Satisfaction in University Academic Staff*. Educational Psychology.
- Ahmad, Safia (1989) *Perceived Importance of Job Factors by Indian Women Workers*. Journal Of The Indian Academy Of Applied Psychology, Vol. 15, No.2.
- Ball Colin, J and Stenlund, Vern (1990) *The Centrality of Work, Working Conditions and Job Satisfaction*. Comparative Education.
- Barber A and Dunham R (1992) *The Impact of Flexible Benefits on Employee Satisfaction: A Field Study*. Personal Psychology.
- Bateman, Thomas S and Strasser, Stephen (1983) *A Cross-Lagged Regression Test of the Relationships between Job Tension and Employee Satisfaction*. Journal Of Applied Psychology, Vol. 68, No. 3.
- Berg, T R (1991) *The Importance of Equity Perception and Job Satisfaction*. Group and Organisation Management.
- Billingsley, Bonnie and Cross, Lawrence (1992) *Predictors of Commitment, Job Satisfaction, and Intent to Stay in Teaching: A Comparison of General and Special Educators*. Journal of Special Education.
- Black, Jonathan L (1997) *Career Development: Job Satisfaction, Salaries, Teachers' Unions and Teachers*. Education Administration Abstracts.
- Burrows, Linda, Munday, R, Tunnell, J and Seay, R (1996) *Leadership Substitutes: Their Effects on Teacher Organizational Commitment and Job Satisfaction*. Journal of Instructional Psychology.
- Carter, R, Bowman, R, Kher, N and Bowman, V (1994) *Counselor Educator's Perceptions of Satisfying and Dissatisfying Teaching Experiences*. Education.
- Chaplain R P (1995) *Stress and Job Satisfaction: A Study of English Primary School Teachers*. Educational Psychology.
- Dekker, I, Barling, J and Kelloway, E K (1996) *Workforce Size and Multifaceted Job Satisfaction: A Cross-National Study*. Journal of Social Psychology.
- Ellis, N and Bernhardt, R (1992). *A Study of Job Satisfaction Factors*. Clearing House.
- Evans, V and Johnson, D J (1990) *The Relationship of Principals' Leadership Behavior and Teachers' Job Satisfaction and Job-Related Stress*. Journal of Instructional Psychology.
- Evans, W and Hohenshil, T (1997) *Job Satisfaction of Substance-Abuse Counselors*. Alcoholism Treatment Quarterly.

- Finlay, W, Marin, J, Roman, P and Blum, T. (1995) *Organisational Structure and Job Satisfaction*. Administration and Society, Vol. 27, No. 27.
- Freeborn, D K and Hooker, R S (1995) *Satisfaction of Physicians' Assistants and Other Non-Physician Providers in Managed-Care Settings*. Public Health Reports.
- Gerhart, Barry (1987) *How Important Are Dispositional Factors as Determinants of Job Satisfaction? Implications for Job Design and Other Personnel Programs*. Journal Of Applied Psychology, Vol. 72, No. 3.
- Gillian, F (1994) *Employees Prefer Praises Over Raises*. Personnel Journal, No. 73.
- Graham, E, West, R and Schaller, K (1992) *The Association between the Relational Teaching Approach and Teacher Job Satisfaction*. Communication Reports.
- Green, R S, Johnson, D J and Campbell, W J (1991) *Teacher Job Satisfaction and Teacher Job Stress: School Size, Age, and Teaching Experience*. Education.
- Guion, R M (1958) *Industrial Morale: The Problem of Terminology*. Personal Psychology.
- Hackman, J R and Oldham, G R (1976) *Motivation through the Design of Work*. Journal Of Organisational Behaviour and Human Performance, Vol. 16.
- Hackman, J Richard and Lawler, Edward E (1971) *Employee Reaction to Job Characteristics*. Journal Of Applied Psychology. Monograph, Vol. 55, No. 3.
- Hellman, C M (1997) *Job Satisfaction and Intent to Leave*. Journal of Social Psychology, Vol. 137 No. 6.
- Herzberg, F (1987) *One More Time: How Do You Motivate Employees?* Harvard Business Review, September-October, Pp. 109-120.
- Hulin, Charles L and Cain Smith, Patricia (1964) *Sex Differences in Job Satisfaction*. Journal Of Applied Psychology, XL VIII (2).
- JIME Review (1998) *Special Report: The Saudi Economic Offset Program. A Review of Middle Eastern and Energy Affairs*, Spring, Vol.11, No.39.
- Judge, T A and Watanabe, S (1993) *Another Look at the Job Satisfaction-Life Satisfaction Relationship*. Journal Of Applied Psychology, Vol. 78, No.6.
- Kadushin, G and Kulys, R (1995) *Job Satisfaction among Social Work Discharge Planners*. Health and Social Work (20).
- Khaleque, A and Rahman, M A (1987) *Perceived Importance of Job Facets on Overall Job Satisfaction of Industrial Workers*. Journal Of Human Relations, Vol. 40, No. 7.

- Kiely, Julia (1986) *The Dynamics of Job Satisfaction: A Longitudinal Study*. Personnel Review, Vol. 15, No 4.
- Kiyak, A, Namazi, K and Kahana, E (1997) *Job Commitment and Turnover among Women Working in Facilities Serving Older Persons*. Research on Aging 19(2).
- Knoop, R (1995) *The Relationship among Job Envelopment, Job Satisfaction and Organizational Commitment for Nurses*. Journal of Psychology: Interdisciplinary and Applied.
- Latham, A S (1998) *Teacher Satisfaction*. Educational Leadership.
- Liacqua, J A, Schumacher, P and Li, H C (1995) *Factors Contributing to Job Satisfaction in Higher Education*. Education.
- Lobosco, A F and Newman, D (1992) *Teaching Special Needs Populations and Teacher Job Satisfaction*. Urban Education.
- Locke, E A (1965) *The Relationship of Task Success to Task Linking and Satisfaction* Journal Of Applied Psychology, Vol. 49.
- Luthans, Fred and Thomas, Linda T (1989) *The Relationship Between Age And Job Satisfaction: Curvilinear Results From An Empirical Study; A Research Note*. Personnel Review, Vol. 18 No. 1.
- Margolis, B L, Kroes, W M and Quinn, R P (1974) *Job Stress: An Unlisted Occupational Hazard*. Journal of Occupational Medicine 16.
- Marriott, A, Sexton, L and Staley, D (1994) *Components of Job Satisfaction in Psychiatric Social Workers*. Health & Social Work.
- Martin, Jack and Shehan, Constance (1989) *Education And Job Satisfaction*. Journal Of Work And Occupation, Vol. 16, No 2, May.
- Mason, E S (1995) *Gender Differences in Job Satisfaction*. Journal of Social Psychology, 135 (2).
- Meek, Anne (1998) *Much to Celebrate*. Educational Leadership, 12-17.
- Merit, D (1995) *What Really Motivates You?*. American Printer, 214.
- Mitchell T R (1982) *Motivation: New Directions for Theory, Research and Practice*. Academy of Management Review.
- Morgan, R, McDonagh, P and Ryan-Morgan, T (1995) *Employee Job Satisfaction: An Empirical Assessment of Marketing Managers as an Occupationally Homogenous Group*. Journal of Managerial Psychology, 10.

Morrison K A (1996) *An Empirical Test of a Model of Franchises Job Satisfaction*. Journal of Small Business Management.

Mottaz, Clifford (1984) *Education and Work Satisfaction*. Journal Of Human Relations, Vol. 37, No 11.

Mumford, Enid (1970) *Job Satisfaction - A New Approach Derived from an Old Theory*. Sociological Review, Vol.18 , No. 1.

Nelson, F H (1994) *Conditions of Employment for Teachers in the United States*. Clearing House.

Nicholson, N, Brown, C A and Chadwick-Jones J K (1976) *Absence from Work and Job Satisfaction*. Journal Of Applied Psychology, Vol. 61.

Ninomiya, A and Okato, T (1990) *A Critical Analysis of Job Satisfied Teachers in Japan*. Comparative Education.

Omundson, J and Schroeder, R G (1996) *Type A personality, Job Satisfaction, and Turnover Intention among Certified Public Accountants: A Comparison of Euro-Americans and Hispanics*. Hispanic Journal of Behavioral Sciences.

Organ, D and Lingl, A (1995) *Personality, Satisfaction and Organizational Citizenship Behavior*. Journal of Social Psychology.

Oswald, A and Warr P (1996) *Is Job Satisfaction U-shaped in Age?* Journal of Occupational & Organisational Psychology, 69 (1).

Petrovski, P, Gleeson, G (1997) *The Relationship between Job Satisfaction and Psychological Health in People with an Intellectual Disability in Competitive Employment*. Journal of Intellectual & Development Disability.

Pool, S W (1997) *The Relation of Job Satisfaction with Substitutes of Leadership, Leadership Behavior, and Work Motivation*. Journal of Psychology: Interdisciplinary & Applied.

Rinehart, J S and Short, P M (1994) *Job Satisfaction and Empowerment among Teacher Leaders, Reading Recovery Teachers, and Regular Classroom Teachers*. Education.

Salancik, Gerald R and Pfeffer, Jeffrey (1977) *An Examination of Need Satisfaction Models of Job Attitudes*, Administrative Science Quarterly, Vol. 22.

Spector, Paul E (1982) *Behaviour in Organisations as a Function of Employee's Locus of Control*. Psychological Bulletin, Vol. 91.

Starcevich, Matt M (1972) *Job Factor Importance for Job Satisfaction and Dissatisfaction across Different Occupational Levels*. Journal Of Applied Psychology, Vol. 56, No 6.

Steers, Richard M and Rhodes, Susan R (1978) *Major Influences on Employee Attendance: A Process Model*. Journal Of Applied Psychology, 63.

Taylor, D L, Tashakori, A (1995) *Decision Participation and School Climate as Predictors of Job Satisfaction and Teachers' Sense of Efficacy*. Journal of Experimental Education.

Taylor, Lynda King (1979) *Notes On Job Enrichment And Motivation*. Department Of Employment Work Research Unit, Paper No 9.

Tierney, P (1997) *The Influence of Cognitive Climate on Job Satisfaction and Creative Efficacy*. Journal of Social Behavior & Personality.

Travers, C J and Cooper, C I (1993) *Mental-Health, Job-Satisfaction and Occupational Stress among UK Teachers*. Journal Of Work And Stress, Vol. 7, No. 3.

Verdugo, R, Greenberg, N, Henderson, R, Uribe, O and Schneider, J (1997) *School Governance Regimes and Teachers' Job Satisfaction: Bureaucracy, Legitimacy, and Community*. Educational Administration Quarterly.

Wanous, John and Lawler, Edward (1972) *Management and Meaning of Job Satisfaction*. Journal of Applied Psychology, Vol. 56, No. 2.

Ward, M and Holdaway, E A (1994) *Facet Importance and the Job Satisfaction of School Principals*. British Educational Research Journal.

Wu, V and Short, P M (1996) *The Relationship of Empowerment to Teacher Job Commitment and Job Satisfaction*. Journal of Instructional Psychology.

(Uncredited) (1997) *Middle East Report*, Journal of Electronic Defense, Vol.20, No. 5, May.

### **Seminar Papers and Presentations:**

Joynt, Pat (1975) *The Development of the Expectancy Theory of Vroom*. Presented at a Seminar on Personnel Research In Europe, Conducted by The European Institute for Advanced Studies In Management, Brussels, Belgium.

### **Newspapers and Magazines:**

Al Yamamah Magazine (1998) *Special Issue: Economic Offset Program in The Kingdom of Saudi Arabia*. Issue No. 1528- 48<sup>th</sup> Year, Oct.

Arab News (1992) *Joint Ventures Gain Momentum in Kingdom of Saudi Arabia*. Vol. XVII, No. 07, October 26.

Arab News (1995) *Advanced Electronics Company Wins Kuwaiti Circuit Board Contract*. Vol. XX, No. 71, Tuesday, February 7.

Arab News (1995) *AT&T To Invest More Than \$400 million in Kingdom*. Vol XX, Sunday, July 30.

Arab News (1997) *AEC To Produce Chaff Under Agreement*. Vol. XXII, No.202, Tuesday, June 17.

Arab News (1997) *15 High-Tech Companies Taking Part in Offset Venture*. Vol.XXII, No. 214, Sunday, June 29.

Arab News (1998) *15 Firms Formed in Offset Program*. National Day Supplement, September 23.

CommsMEA (1996) *Building a Brighter Future*. Vol.6, No.1, January.

CommsMEA (1996) *TEP6: Still on Target, Still on Time*. Express Card 11, Vol. 6, No. 5, May.

CommsMEA (1997) *AEC Exports to South America*. An ITP Publication, Vol. 7, No. 6, June.

Defense News (1997) *Riyadh Firm Wants Saudi R&D Funds To Shift from West*. Vol. 12, No. 11, March.

Defense News (1997) *Saudis Press Governments To Honor Offset Packages*. Vol.12, No. 11, March.

Defense News (1997) *Saudis May Penalize Offset Delinquents*. International edition, Vol.12, No. 11, March.

Emirates News (1997) *Saudi Firm Ready To Offer UAE Top Electronics*. Vol. 26, No 108.

Global Finance (1998) *Special Report: Saudi Arabia at the Crossroads*. September.

Gulf News (1995) *AT&T Plans More Saudi Investments*. Sunday, July 30.

Iktisadiyat al- Souq al- Arabi (1998) *Special File: Saudi Economic Offset Program*. Sept, Year 2, Issue 20.

International Herald Tribune (1996) *New Image for Saudi Arabia*. Friday, July 5. p.14.

Jane's Defence Weekly (1994) *Saudi Firm wins ALQ-135 Contract*. 12 November.

MEED (1985) *Saudi Arabia: Offset poised for take-off*. 01 February.

MEED (1994) *Saudi Arabia. Middle East Business Weekly*. 15 April.



Middle East Communications (1995) *AT&T Awards Two Contracts for TEP-6 in Saudi Arabia*. Vol. 10, No. 2, Feb.

Middle East Communications (1997) *AEC Wins \$670K Payphone Deal*. Vol. 12, No.6, June.

Middle East Insight (1995) *Opportunities in Offset: Saudi Offset Program Provides New Passageway into Kingdom*. Special Edition, Vol. XI, No. 6.

Military Technology (1996) *Electronic Spectrum: AEC Leading the Middle East in Electronics*. No.2 February.

Riyadh Daily (1996) *Advanced Electronics Company Committed to Saudization, Quality*. Wednesday, 5 June.

Riyadh Daily (1996) *Kingdom Stressing Technical Education*. Saudi Scene, Friday, 7 June.

Riyadh Daily (1997) *Advanced Electronics Company: Dedicated to Quality, High-Tech*. Thursday, 8 May .

Saudi Commerce & Economic Review (1995) *Advanced Electronics: Saudis Leap into High-Tech Realm*. No.11, March.

Saudi Commerce & Economic Review (1998) *Offset Projects Usher in High-Tech Industries*. No.53., September.

Saudi Economic Survey (1994) *AT&T Awards Contract to Local Firm for Manufacture of Printed Circuit Boards*. Vol. XXVIII, No. 1398, 28 Dec .

Saudi Gazette, (1996) *Advanced Electronics Company To Develop Advanced System for Armed Forces*. No 6835, Sunday, 10 March.

Technical Review Middle East (1996) *Offset Advantages*. March-April.

The Wall Street Journal (1995) *Special Supplement on Saudi Arabia: Offset Program Broadens Its Scope*. Friday, 3 Feb.

### **Company Publications:**

Advanced Electronic Company (AEC) Publications (1998) Riyadh, Kingdom of Saudi Arabia

Aircraft Accessories & Components Company Publications (1998) Riyadh, Kingdom of Saudi Arabia.

Al Salam Aircraft Company (ASAC) Publications (1998) Riyadh, The Kingdom of Saudi Arabia.

International System Engineering (ISE) Publications (1998) Riyadh, The Kingdom of Saudi Arabia.

British Aerospace (BAe) (1998) *Investment in the Kingdom of Saudi Arabia*.

### **Official Publications:**

British Offset Office (1997) *Offset Newsletter: Al Yamamah Economic Offset Programme*. Issue No 9, May.

Saudi Economic Offset Secretariat (EOS) (1996) *Saudi Economic Offset Program Guidelines*.

ESCWA (Economic and Social Commission for Western Asia) (1999) *Survey of Economic and Social Development*, United Nations, New York.

Saudi Arabian Ministry of Defence and Aviation (MODA) (1995) *Saudi Economic Offset Program, General Guidelines*.

Saudi Arabian Ministry of Planning (1995) *Sixth Development Plan for the Kingdom of Saudi Arabia: 1995-2000*.

Saudi Economic Offset Program (1983) *Peace Shield Investment Offset Program Guideline Supplement*, November.

Saudi Economic Offset Program (1996) *First Phase Companies*

### **Unpublished Materials:**

Al-Ameri, Othman S. (1995) *Factors in Job Satisfaction among Trained Health Administration in the Saudi Health Care System*. University of Manchester, UK. Unpublished PhD.

Al-Rahaimmi, Fahed A. (1990) *An Analytical Study of Job Satisfaction in the Saudi Arabian Public Sector*. University of Liverpool, UK. Unpublished PhD.

Taher, Walid A. (1989) *The Job Satisfaction and Work Motivation, Job Satisfaction and Work Involvement*. University of Colorado at Denver, USA. Unpublished PhD.

Tawalbah, M. A. (1999). *Job Satisfaction among Computer Teachers at Jordanian Public Schools*. Unpublished paper.

